EXHIBIT "L"

members of the jury. I hope everybody had a nice weekend. We will resume the trial at this time. The People may call their next witness.

MS. BOOK: Thank you, Your Honor. The People call Dr. Carole Jenny to the stand.

CAROLE JENNY, M.D., after first having been duly sworn by the Clerk of the Court, was examined and testified as follows:

THE CLERK: The sworn witness is Carole Jenny, C-A-R-O-L-E J-E-N-N-Y.

THE COURT: Whenever you are ready.

MS. BOOK: Thank you, Your Honor.

DIRECT EXAMINATION

BY MS. BOOK:

Q. Good morning.

A. Good morning.

Q. Could you please state your name for the record?

A. Carole Jenny.

Q. Where are you currently employed?

A. I am a Professor of Pediatrics at Brown Medical School in Providence, Rhode Island, and I am the Director of the Child Protection Program at the Hasbro Children's Hospital in Providence.

Q. And how long have you been employed in these two positions?

A. For 13 years.

Q. In both of them?

A. Yes.

Q. What are your duties currently at the Hasbro Children's Hospital?

A. I run a child protection team. This is a group of physicians, nurses, social workers who are consulted whenever there's concerns about possible abuse or neglect of a child in the hospital being treated, inpatient or outpatient. We run a 24-hour on-call service for the Emergency Department and for the community, if people want to call with questions. We do research. We run clinics to evaluate children who are outpatients. We do medical evaluations on all children who come into State care to make sure that their medical needs are met; that they have had their immunizations; that they can see and hear. We screen for mental health problems, chronic disease, and make sure their medications are well regulated. We have a fellowship training program, where we train young physicians in the field of child abuse pediatrics to be subspecialists.

Q. Do you still regularly see patients?

A. Yes, I do, every week.

Q. Okay. How many patients would you say you see and treat a week?

A. Well, my whole team sees about 2,000. I supervise about a third of those, and I personally see anywhere -- well,

it depends whether I'm on the clinical service. If I'm on the clinical service, it can be 10 or 20 or 30 a week, or two or three, if it happens to be my week to work on the service.

Q. Okay. Can we turn to your educational background for a moment? Could you please tell us: Where did you first attend college?

A. I graduated from the University of Missouri in Columbia.

Q. What was your degree in?

A. Zoology.

Q. Did you go on from there?

A. Yes. I did two years at Dartmouth Medical School in Hanover, New Hampshire, and then I graduated from the University of Washington Medical School, and I also have an MBA in health care from the Wharton School at the University of Pennsylvania.

Q. What year did you earn your MBA?

A. In 1976.

Q. What year did you earn your medical degree?

A. 1972.

Q. And following earning your medical degree, did you go on to do any residencies or internships?

A. Yes, I did.

Q. Could you please describe those to us?

A. I was an intern in pediatrics at the University of

Colorado Hospital in Denver and a resident in pediatrics at the Philadelphia Children's Hospital in Philadelphia, and I was a fellow at Robert Wood Johnson Clinical Scholar at the University of Pennsylvania after I finished my residency.

Q. In what year was that?

A. Well, I finished all of my training in '76.

Q. Do you hold any certifications or licenses?

A. I'm licensed to practice medicine in the State of Rhode Island, and I'm board certified by the American Board of Pediatrics.

Q. How does one become board certified?

A. You complete a residency that's approved by the American Council on Continuing Medical Education, ACGME -- Graduate Medical Education - sorry - and you complete an approved residency and internship, and then you pass board examinations in your specialty.

Q. Is there currently a board certification in child abuse?

A. There will be a subspecialty board of child abuse pediatrics that -- the first examination is being held this November. And then after that exam, physicians who have specialized and done training in this field will then be board certified.

Q. Will you become board certified in child abuse?

A. I know I will, because I'm on the committee that

writes the exam. So, I don't have to take it, thank God.

Q. And you mention that you served as a faculty member at Brown University?

A. Yes. I'm a professor.

Q. Could you tell us more about that, please?

A. I teach medical students. I teach, obviously, residents and interns. I lecture in the undergraduate college I supervise undergraduates and graduate students who are working on research projects, theses advisor for undergraduates, for example; so, just a typical academic position within the university.

Q. What field do you mostly teach in?

A. Well, in pediatrics, in child abuse. I also have been -- do a lot of teaching in sex abuse, child neglect, Munchausen by proxy, all fields of child abuse, but my particular area of interest is head injury in infants.

Q. Can you briefly describe for us your employment history and administrative positions?

A. Well, after I finished my fellowship, I was on the faculty at University of Washington for a few years, and then I took several years off when my children were little, until they were in school, and then I went back at the University of Washington. That's when I began working in the field of child abuse. I then was an associate professor at University of Colorado from '90 to '96; and then from '96 on, I have been a

professor at Brown.

Q. What hospitals have you had or do you currently have privileges at?

A Currently at Hasbro Children's; before that, at Denver Children's; and before that, at Seattle Children's, Harborview Medical Center and several other community hospitals in the Seattle area.

Q Can you briefly tell us about some of your professional memberships?

A. I'm a member of the American Academy of Pediatrics. I'm the chair of their committee on child abuse and neglect. I'm a member of the American Professional Society On the Abuse of Children. I'm a member of the International Professional Society On the Prevention of Abuse of Children. I am a member of the American Medical Association and several other medical groups.

Q. Have you been appointed to any national committees?

A. Yes.

Q. What national committees have you been appointed to?

A. Well, again, I'm the chair of the Committee on Child Abuse for the American Academy. I have been on the Board of Directors of the American Professional Society on Abuse of Children, and I have served on several committees for -- for instance, the CDC, in terms of looking into injury and injury prevention issues.

Q. What is CDC?

A. Center for Disease Control, United States Government

Q. Have you been on any state or local committees that you haven't already mentioned?

A. Yes.

Q. What state and local committees?

A. For five years, I ran the Child Death Review Group for the State of Rhode Island, where we reviewed every child's death in the state. I have been on violence prevention groups I have been an advisor to the State Child Advocate. I have done several, you know, state and local activities, mostly in terms of child advocacy and child protection.

Q. Have you had the opportunity to consult in your fiel at all?

A. Yes.

Q. In what areas?

A. Well, again, I have consulted for hospital programs that have either wanted to establish programs in child abuse o wanted review or quality assurance, basically, of their programs.

Q. Have you been published?

A. Oh, yes.

Q. How many times, if you know?

A. I don't know; over a hundred. I have a new textbook coming out, actually, in a couple of months. I have written

many journal articles, research articles. I co-authored two textbooks, other textbooks, and just many books and chapters and research papers.

Q. In what areas have you been published on?

A. Physical abuse of children, sexual abuse of children, biomechanics of head injury, sexual assault of adults, sexually transmitted diseases, Munchausen's Syndrome by proxy.

Q. Okay. And have you supervised fellows in forensic pediatrics?

A. Yes.

Q. First canyou tell us what forensic pediatrics is?

A. Well, now it's referred to as child abuse pediatrics. That's the name that the board embraced when they established the subspecialty, the American Board of Pediatrics, but these are pediatricians who finished their residence training and then go on to have extra training in the field of child abuse and neglect.

Q. Approximately how many fellows have you supervised?

A. I think I'm up to 28 at this point. I have a new crop currently.

Q. Have you lectured in your field?

A. Yes, I have.

Q. On what topics and where?

A. Gosh, all over the world; in Asia, Europe, South America, every state in the Union, Canada, Mexico, and mostly

in areas involving child physical abuse, child sexual abuse, child neglect.

Q. Could you approximate how many times you have lectured?

A. Oh, hundreds.

Q. Have you testified in court before?

A. Yes, I have.

Q. Approximately how many times?

A. I testify once or twice a month.

Q. Have you been qualified as an expert witness in a court before?

A. Yes.

Q. In what courts have you been qualified as an expert?

A. In 17 states, in England before the Courts of Appeal the high court of England; in Canada, in Federal Court, in military courts'-martial, in family courts and in superior courts.

Q. Have you received any honors or awards in your field

A. Yes.

Q. Could you tell us what some of those honors and awards were?

A. I received an award from the Federal Government for work in prevention of child maltreatment. I received the American Academy of Pediatrics highest award in the field of child abuse pediatrics. I received the Outstanding

Professional Award of the American Professional Society on abuse of children, and others.

Q. Dr. Jenny, if you could estimate, do you know how many children you have seen with head trauma over the course of your career?

A. Thousands

Q. And are you directly involved with treating those thousands of children?

A. Yes. Most of those are patients I have seen, but I have also been consulted in cases of children who I haven't seen

Q. Did there come a time that you were contacted by the Rensselaer County DA's Office to consult on a case involving the death of Matthew Thomas?

A. Yes.

MS. EFFMAN: Your Honor, may I voir dire the witness before we get into any testimony by the witness concerning this matter?

THE COURT: Well, I don't think anything has been offered yet, so I think that request is premature.

MS. EFFMAN: Before anything comes out, I would like to voir dire the witness.

THE COURT: Certainly, if you make the request at that time, it would be appropriate.

Q. Are you being compensated by the District Attorney's

Office for your time and consultation on this case?

A. Yes, I am.

Q. How much per hour?

A. $300 an hour.

Q. Is there a maximum daily rate?

A. $3,000.

Q. Have you testified for both the prosecution and defense?

A. Yes.

Q. And when you testify regarding a patient that you have treated yourself, are you paid for that testimony?

A. No. That's part of my job and service to the community. So, my kids, I don't charge for.

Q. Do you testify outside of patients that you have treated yourself very often?

A. Four or five times a year, I would guess. It depends; some years more, some years less.

Q. Now, prior to coming here today, did you review any records involving [redacted] [redacted] or members of his family?

A. Yes, I did.

Q. Could you tell us what records you reviewed?

A. I reviewed the birth records and his mother's health records from the birth. I reviewed their hospitalization -- he and his twin brother's hospitalization following birth. I reviewed his well child records. I reviewed his emergency roor

record from a visit on the 13th of September. I reviewed his records from Samaritan Hospital when he was acutely ill on the 21st. I reviewed his records from Albany Medical Center. I reviewed some parts of his father's statement about the events leading up to the child's illness. I reviewed his mother's statement. I reviewed the autopsy report.

Q. Did you also review photographs?

A. I did.

Q. And did you also review a September 13th Samaritan Hospital visit by [redacted] [redacted]?

A. Yes.

Q. Doctor, let's start at the beginning and talk about the prenatal history of Wilhemina Hicks. You testified that you reviewed her prenatal history. Did she have any prenatal and pregnancy problems?

A. Yes, she did.

Q. Could you tell us about those?

A. She had gestational diabetes, which means high blood sugar in the pregnancy. She had twins, which obviously is a complicating factor, always makes the pregnancy more complicated than it would be otherwise. She had high blood pressure, or pregnancy-induced hypertension, we call it, which is a complicating factor. She had premature onset of labor and premature rupture of the membranes around the babies and premature delivery.

Q. Was [redacted] [redacted] born premature?
A. Yes.
Q. At how many weeks gestation?
A. Thirty-three weeks.
Q. How long is a typical gestation period or the recommended period?
A. Thirty-eight weeks is considered full term. Forty i the average for a normal baby.
Q. Okay. And where was [redacted] [redacted] born?
A. He was born at Albany Medical Center.
Q. Was [redacted] [redacted] also born premature?
A. Yes, he was.
Q. And was he born at Albany Medical Center, as well?
A. Yes, he was.
Q. Were there any birth complications with [redacted]'s birth?
A. He was the first twin. His initial Apgar score was little low. Apgar is a score that they use to term how well the child has made the transition from within the uterus to the outside world. On the other hand, a second score, which is predictive of your outcome, was very good. It was nine out of ten, which is just about as good as you get. So, he did well after birth. He had the typical problems of preemies, had a little bit of respiratory distress and was on oxygen for a while. He had some hypoglycemia, or low blood sugar, which was

adequately treated, and some trouble controlling his temperature which, again, is normal for babies who are born prematurely.

Q. Was he delivered vaginally, or did some other method have to be used?

A. It was a vaginal delivery.

Q. And what about Malakai Thomas; how was he born?

A. He was also born vaginally. He was the second baby and he was a breach baby.

Q What does breach mean?

A. That means comes out feet first

Q. Does any special instrument have to be used when there's a breach presentation?

A. Well, it depends, but I think they used forceps in his delivery.

Q. Doctor, did you notice any mixup on the birth certificates of Matthew and Malakai Thomas?

A. There was some concern that the birth certificates were reversed and that Matthew was referred to on the birth certificate as Twin B, or the second twin, when, in fact, he was the first twin delivered.

Q. Okay. Is there any indication in the records that Matthew, who passed away, was not the firstborn child?

A. Except for the confusion on the birth certificate, he was identified by his mother and by his physician as the

firstborn.

MS. EFFMAN: I object. This goes to Albany Medical Center records, and this doctor was not involved in the process.

THE COURT: I think the witness is interpretin the records. I will overrule the objection.

MS. BOOK: Thank you, Your Honor.

Q. I'm sorry, Doctor. Was there any indication that [redacted], the child who passed away, was anything other than th firstborn child?

A. Except for the confusion on the birth certificate, no. He was clearly the firstborn of the two.

Q. Okay. And Malakai, who is still living, is there ar indication that he was anything other than the second-born child?

A. Not that I determined.

Q. Okay. You already testified about some of the healt concerns when [redacted] was born. Were there any cardiac concerns?

A. He had a heart murmur, and he was evaluated by a cardiologist and found to have a narrowing of one of his heart valves, the pulmonic valve.

Q. Was this something that the doctors were concerned about?

A. Well, they obviously heard this murmur, and they

asked for a cardiology consult. The cardiologist said it was something he should grow out of and did not require any treatment and just asked him to come back and see him in six months.

Q. Was there anything special that had to be done, other than the six-month follow-up, with respect to [redacted]'s care?

A. No

Q. In your expert opinion, was this condition something to be concerned about?

A. No. According to the cardiologist, it was a benign problem and would in no way affect his heart function.

Q. How was the rest of Matthew's stay at Albany Medical Center after he was born?

A. Actually, it was very noneventful. He grew well. He gained well, and he had the normal problems that we see with premature infants, but he didn't require being on a ventilator or very unusual care; and in fact, you know, was -- did quite well for a preemie.

Q. At some point, was [redacted] transferred to another hospital?

A. Yes, he was.

Q. Where was he transferred to?

A. He was transferred to St. Mary's.

Q. Why was he transferred?

A. Well, he didn't require a high level of care. And

so, it's pretty common, when you have a child in an Intensive Care Unit, when they are stable and they are fine and they ca be cared for at a lower level of intensity, you send them to hospital closer to their home for the convenience of their parents.

Q. And did you review [redacted] [redacted]' records from St. Mary's Hospital?

A. Yes, I did.

Q. How was he during his stay at St. Mary's Hospital?

A. Again, he did very well. He grew. He gained and didn't have any particularly life-threatening or unusual complications.

Q. Doctor, are you familiar with intracranial bleeding'

A. Yes.

Q. Are you familiar with subdural hematomas?

A. Yes.

Q. Was there any indication to you that [redacted] [redacted] had intracranial bleeding or was born with subdural hematomas?

A. No.

Q. Why not?

A. Well, a couple of things. One, he didn't have signs and symptoms, like seizures, for example, of intracranial bleeding; two, he had an ultrasound done a few weeks after birth, which was very normal and which could detect subdural fluid in the forward part of his head. He had -- and also, hi

head grew normally from birth. He grew right along the normal percentile lines for a baby his age. And, so, often we see, in babies that have subdural bleeds that become symptomatic, their heads grow unusually large.

Q. And did [redacted]'s head grow unusually large?

A. He didn't have an unusual head circumference until his very final admission, when he had a very swollen brain.

Q. On September 21, 2008?

A. Yes.

Q. In your experience, is an ultrasound an accepted method of checking premature babies for intracranial bleeds or subdural hematomas?

A. Yes.

Q. Is a CAT scan better?

A. Well, the CAT scan is used in older kids, because we don't have that nice big, open fontanelle. You have to have, you know, an open place. You can't do it through the skull. And it's preferable, because on ultrasound, you don't see bleeds at the back of the head. So, for instance, with a trauma patient, we would get a CAT scan, because we want to see the entire brain, but it certainly shows very well hematomas or bleeding that occurs around the top and sides of the head, which is where this child's bleed was.

Q. So, with respect to [redacted] [redacted], was an ultrasound a good way of checking for whether or not he had intracranial

bleeds or subdural hematomas?

A. Yes.

Q. Was there any indication about whether Malakai, the second-born twin, had any intracranial bleeds or subdural hematomas?

A. No. He also had no symptoms and normal head growth.

Q. Doctor, would you agree that between 25 and 40 percent of newborns have intracranial bleeding?

A. There have been a few studies of normal newborns tha show that small amounts of bleeding in the head are not unusual.

Q. What type of bleeding would we be talking about in these studies?

A. Most of it is in the very back of the head, and ther can be subdural hemorrhages, or what we call intracranial hemorrhages, within the brain substance itself, but they are almost all posterior.

Q. Would you expect to find a subdural hematoma that wa present since birth on an ultrasound of the infant's brain?

A. It would depend on where it was located. If it was located right underneath where the transducer, you know, takes its measurements, yes. If it was located in the very back of the head, I wouldn't.

Q. And, later, you mentioned that you reviewed the autopsy report of [redacted] [redacted]?

A. Yes.

Q. Were you aware of whether he had any subdural hematomas?

A. Yes, he did.

Q. And where were those located?

A. On the right side, some on the left, again, parietal, which means along the side, and temporal, around the front and top of his head.

Q. Are these the type of hematomas that you would expect to find on an ultrasound done at birth?

A. Yes, if they were there.

Q. So, do you have an opinion as to whether or not [redacted] was born with subdural hematomas or intracranial bleeding?

MS. EFFMAN: I'm going to object, Your Honor. She's not a neurologist. She didn't perform the ultrasound in this case. There hasn't been sufficient foundation laid for that opinion.

MS. BOOK: Your Honor, I believe there has been a sufficient foundation laid for that opinion. Dr. Jenny has testified she's treated thousands of patients with head trauma directly. She has had, in her experience, the opportunity to review and is certainly familiar with ultrasounds, and she reviewed the report of the ultrasound done in this case. I believe there has been a sufficient

foundation laid for her opinion regarding this issue.

THE COURT: The objection is overruled.

THE WITNESS: I'm sorry. Would you repeat the question?

MS. BOOK: Would you read back my question, please?

(The previous question was read back by the Reporter.)

A. There was no indication in the record that he had intracranial bleeding.

Q. Or subdural hematoma?

A. Yes.

Q. During [redacted]'s stay at St. Mary's Hospital before he went home, were there any health concerns for [redacted]?

A. Other than the routine things that we see with babie who have -- who are premature. He had been mature enough to eat enough to grow and gain and he had to be able to regulate his temperature but, basically, he had a pretty benign course.

Q. Was he growing and feeding appropriately?

A. Yes. He grew.

Q. Was he able to regulate his temperature?

A. Yes, by the time he was discharged, yes.

Q. And when was [redacted] [redacted] discharged, if you know, from St. Mary's Hospital?

A. I think it was the 18th of May.

Q. Is this a little bit early?

A. I mean, that's a perfectly normal stay in the hospital for a 33-week-old premature baby.

Q. Does that mean he was doing well if he was discharged?

A. Yes.

Q. Were any specific instructions given to the mother, Wilhemina Hicks, for addressing any health concerns with [redacted]?

A. Other than what would be routine for a baby of that gestational age, need more frequent feedings and general routine care.

Q. Did Matthew receive all of his recommended followup care with his pediatrician?

A. Yes.

Q. Was he up to date with his immunizations as of September of 2008?

A. Yes.

Q. As of September of 2008, do you know how many shots [redacted] had for his immunization for streptococcal pneumonia?

A. He had had one vaccine.

Q. Out of how many, Doctor?

A. Out of four. The routine is at two, four, six months, and then one in the second year of life.

Q. Do a significant number of children, in your

experience, die from streptococcal pneumonia before they are able to get all four shots because they are not fully immunized?

A. It's very rare. In the five years that I ran the Child Death Review, when we reviewed every death in the state we had not one single child die from streptococcal pneumonia.

Q. Were there any health concerns for [redacted] [redacted] i the summer of 2008?

A. His mother had called the doctor, because she was concerned he was constipated, because he wasn't having stools every day and was reassured that that's perfectly normal for a child his age, and then he had one visit for a rash on his fac to the doctor.

Q. What was the date of that visit, if you know?

A. I think that was the 13th of September.

Q. And what were the mother's chief complaints on September 13th?

A. She said that she had used a chemical wipe on his face. I don't know what she was wiping off, but she had used this wipe, and it left a rash where she had applied this wipe to the face.

Q. Do you know if [redacted] [redacted] was running a fever or September 13, 2008?

A. No, he was not.

Q. Doctor, are you familiar with the term sepsis?

A. Yes

Q. Could you tell the jury what it means to be septic?

A. It means you have bacteria or viruses in your bloodstream.

Q. What are some of the signs and symptoms of sepsis?

A. For bacterial sepsis, the most common sign is a very high fever, seizures, extensive rashes over like -- look kind of like bruises over the entire body. In older children, chills, lethargy, sleepiness, aches and pains.

Q. Going back for a moment to the September 13th visit of [redacted] to Samaritan Hospital, was [redacted] exhibiting any signs or symptoms of sepsis on that date?

A. No.

Q. Was [redacted] exhibiting any signs of a bacterial infection on September 13th?

A. No, he was not.

Q. Would you have treated Matthew any differently if you had been the doctor at Samaritan Hospital on September 13, 2008?

A. No, I would not have.

Q. Let's talk about the morning of Sunday, September 21, 2008. Do you know what happened to Matthew that morning?

A. In the record, it said that he had awakened early, had a feed, had some milk or formula and Pedialyte, and then went to sleep and was found around 9:00 a.m. not breathing.

Q. Do you know if the EMT's arrived on the scene that morning?

A. Yes, they did.

Q. Did you review the EMT report?

A. I did.

Q. And based on the EMT report, what was [redacted]'s condition at the time they arrived?

A. He was critically ill in cardiopulmonary arrest.

Q. What does that mean?

A. That means he didn't have an effective heartbeat. He didn't have respirations.

Q. Do you know where [redacted] went from there?

A. He went to Samaritan Hospital.

Q. Okay. And how did [redacted] arrive at Samaritan Hospital?

A. Via the paramedics in the EMT van.

Q. What condition was Matthew in upon arrival at Samaritan Hospital?

A. He was critically ill.

Q. Are you familiar with a -- what's called a differential diagnosis?

A. Yes.

Q. What does it mean to do a differential diagnosis?

A. Well, it's something you do every day in clinical practice. A patient arrives with a list of signs and symptoms

and you then consider the possibilities that could have caused that particular cluster of signs and symptoms and design your diagnostic workup based on that.

Q. Are you familiar with Dr. Kardos, the emergency room physician at Samaritan Hospital, and the differential diagnosis she did on [redacted] the morning of Sunday, September 21st?

A. Yes. In her record, she said she was concerned about sepsis. She was concerned about a head injury or intracranial process, and she was concerned about dehydration.

Q. Did she make any attempts to address the issues in her differential diagnosis?

A. She drew lab tests, got a blood count, did a blood culture. She did -- gave what we call bolus of fluids, gave kind of a boost of fluids to increase his blood pressure. She put him on medication to increase his blood pressure. She did not work up his head injury, because he was too unstable.

Q. On a review of the records, would you have done anything differently, Doctor?

A. No. He was handled very well in that Emergency Department.

Q. Could you tell us a little bit about the signs and symptoms that [redacted] presented with on the morning of September 21st?

A. He had absent or almost absent pulse rate. He was

not breathing. He was limp. He was cold. He had very low white blood cell count. He had a high level of carbon dioxid in his body, because he wasn't breathing and blowing off his excess carbon dioxide. He had a low level of oxygen, because he wasn't breathing and oxygenating his tissues.

Q. In your experience, what are these signs and sympto consistent with?

A. Well, several different things. One would be severe cranial cerebral trauma.

Q. What symptoms are consistent with the intracranial trauma?

A. Very low blood pressure, poor heart rate, poor ventilation, limpness, blueness; you know, everything that he had except for the low white count.

Q. And what is the low white count consistent with?

A. You can see that in bone marrow failure. You can se it in severe infections.

Q. Okay. And at that time, was [redacted] exhibiting sign and symptoms of sepsis?

A. Well, he didn't have a fever. He had a temperature that morning of 100.4, which is well within normal for a baby his age for a rectal temp. So, he did not have the high fever we generally see with severe sepsis.

Q. Did Matthew stay at Samaritan Hospital?

A. No. They stabilized him and sent him as soon as

possible to Albany Medical Center.

Q. Why did they send him there?

A. Because they have a higher level of care, and he required quite a high level.

Q. What happened when he arrived at Albany Medical Center?

A. He was admitted to the Pediatric Intensive Care Unit. He had appropriate lines put in. He was put on appropriate medications. He was put on a mechanical ventilator. He received, again -- well, actually, in the emergency room, he had received antibiotics and continued to receive antibiotics and medication to maintain his blood pressure. He received blood products, red blood cells, platelets, and white blood cells. He had a CAT scan and several x-rays, and he was seen by several specialists.

Q. Do you know if he was seen by a neurosurgeon while at Albany Medical Center?

A. Yes, he was.

Q. Are you familiar with the results from the neurosurgeon?

A. The neurosurgeon diagnosed severe head trauma, said he had subdural hemorrhages, but was not stable enough to do any surgical intervention.

Q. Do you know if the subdural hematomas were new or old or both?

A. My understanding is he had old and new bleeds in hi head.

Q. Do you know what the results of the CT scan were?

A. Again, severe cerebral edema and subdural hematoma.

Q. What does cerebral edema mean?

A. That means swelling, excess fluid in the brain tiss itself, a very swollen brain.

Q. Do you know what brings on a cerebral edema?

A. Well, it can be a number of things. It can be from acute trauma to the brain; you know, like a mechanical trauma It can be from lack of oxygen to the brain. It can be from toxins. It can be from metabolic diseases, like diabetes. There's many different things that can cause the brain to swel dangerously.

Q. Was [redacted] seen by a hematologist?

A. He was.

Q. Do you know what the results from the hematology consult was?

A. The hematologist recommended that he have red cells and white cells to build up his blood.

Q. Was that done?

A. Yes. And he also had what we call diffuse -- I'm sorry. Disseminated intravascular coagulation, which is the body's response to very severe stress, like losing your blood pressure for a long period of time, having an infection, havir

a severe injury. It causes the body to sort of use up the materials in the body that support blood clotting, and so blood clotting is then abnormal.

Q. Was anything done to address this?

A. Yes. He had platelets and fresh frozen plasma administered in the hospital.

Q. What does that do?

A. It normalizes some of his clotting function.

Q. Do you know if Matthew was seen by an ophthalmologist?

A. He was.

Q. Do you know what the results from the ophthalmologist were?

A. The ophthalmologist said he had diffused extensive multi-layer retinal hemorrhages.

Q. What does that mean?

A. Well, the retina is the lining of the eyeball that receives light and processes light and makes it into electrical impulses, which then are transmitted to the brain, so that then your brain can tell you what you are seeing, essentially, light, dark, color, shape, whatever. The retinas are many, many layers. There's about six or seven layers of retinal tissue, and with a variety of insults, you can have bleeding within those retinal structures.

Q. And in your experience, with CPR done correctly,

would that cause retinal hemorrhaging?

A. The studies have been very clear that CPR, in and of itself, does not cause retinal hemorrhaging. You will see it in children that have underlying conditions, you know, that le to the CPR being needed in the first place, like head trauma, but studies that have been done, like in Intensive Care Units, where they check the eyes before and after they resuscitate th children, they don't find that the CPR, in and of itself, generally is enough pressure that it actually causes the blood vessels to break.

Q. Can retinal hemorrhage be consistent with head trauma?

A. They are very common, yes.

Q. Can cerebral edema be consistent with head trauma?

A. Yes, very common.

Q. Do you know what the results of the blood culture taken at Samaritan Hospital turned out to be?

A. It was positive for a bacteria called streptococcus pneumoniae.

Q. What is streptococcus pneumoniae?

A. It's a not uncommon bacteria that inhabits the respiratory tract, the nose, the ears. It's a very common cause, or at least prior to the development of vaccine, was a very common cause of ear infections, for instance, in infants and young children. It can cause pneumonia. It can cause

meningitis. It can cause sepsis.

Q. Did [redacted] have any preexisting problems that would have made him susceptible to an infection with streptococcus pneumoniae?

A. Well, the human immune system is a very complex system, and the central nervous system is very much involved in terms of regulating your response to threats, basically, from outside substances like bacteria. So, the fact that he had had a preexisting head injury, I think, made him much more susceptible to complications than he would have been otherwise.

Q. And how would a baby with head trauma be more susceptible to this?

A. Again --

MS. EFFMAN: Objection, speculation. Judge, she's not a neurosurgeon.

MS. BOOK: Your Honor, she's talking about diseases and pneumonia that children can get. Certainly, a pediatrician that's been working in this field for almost 40 years treating children can testify as to a pneumonia.

MS. EFFMAN: Can we approach, please?

THE COURT: Yes.

(Proceedings continue at the bench outside the hearing of the jury as follows:)

MR. FROST: Dr. Jenny is talking about

preexisting head injury. There's no evidence in this ca of preexisting head injury. I think she's referring to chronic subdural hematoma, and that's an awful long stretch. It's pure speculation that there was a chronic subdural hematoma that probably involved six or so bleed or a preexisting head injury that made this child susceptible or more susceptible. I think it's pure speculation. There's no evidence to support that speculation. It's without any evidentiary foundation at all. It's just that, speculation. We are moving to strike her answer, and we object to the question.

THE COURT: Ms. Book?

MS. BOOK: Your Honor, she's talking not only about the older subdural hematoma, but when this child contracted the pneumonia, it was after days, which is already in evidence, repeated throwing, which would cause the head injuries she's testifying to, what she believes this to be, preexisting head trauma, as well as the head trauma that would have included Wednesday and Thursday nights.

MR. FROST: But she needs to establish a time.

THE COURT: I agree with the defense. The testimony is appropriate. Let's just clarify for the jur when we are talking about, so they don't get the impression we are talking about weeks or months prior to

that As long as we are talking about in the 13 days or so in question, I will allow it.

MS. BOOK: Also, Your Honor, if she does testify there are subdural hematomas that date back a couple months, it's surely something that she should be able to address, that caused this injury. This is something brought up by the defense; that there's old existing --

MR. FROST: She --

MS. BOOK: Can I finish? There's these older preexisting subdural hematomas; that they are dating back to birth. It's our contention they don't date back to birth and may have been caused by a previous trauma. We didn't put that in issue. They put that in.

MR. FROST: They are perfectly free to discuss preexisting hematoma, but to speculate that the preexisting chronic hematoma is due to preexisting head injury is pure -- it's pure speculation, Your Honor.

MS. BOOK: Your Honor, I would disagree. She can say this is not a naturally occurring something that came from birth, as the defense has been arguing, preexisting subdural hematoma. We would have been perfectly comfortable only talking about the time frame delineated in the indictment, but the defense has put this in issue; that there was an older subdural hematoma. We should be able to put in our theory as to where this came

from; that, in fact, it wasn't a birth complication, that this was a trauma from --

MR. FROST: There are other causes than preexisting injury.

MS. BOOK: You are free to explore that.

MR. FROST: She's not free to speculate.

THE COURT: I agree that the defense has opened the door, if you will, by the -- opened the door as to th cause of the preexisting problems, so the People can explore that.

MS. BOOK: If you would like me to kind of talk about the preexisting injury and the time frame --

THE COURT: My concern is it's one thing to say that these types of problems were not caused by birth; it's another thing to say how they were caused, and I think that's the crux of the defense's objection, is that she would be speculating as to how they were caused.

MS. BOOK: Your Honor, if I could speak to that Maybe -- I agree. Maybe she can't say that, maybe she can't say the Defendant threw the child and did this, but she should be able to talk about whether or not these are naturally occurring, if this is something that came from illness or birth complications, because that certainly changes --

THE COURT: I think she's qualified to testify

in those terms but --

MS. EFFMAN: I would object to her referring to anything as a prior injury. These can be caused by things that have nothing to do with trauma, the chronic subdural hematoma. Referring to it as a prior injury is speculative, and she shouldn't be able to refer to it as a prior injury

MS. BOOK: That's exactly why we should be able to do that. If we don't mention it, the defense is going to put a spin on it; that they were a naturally occurring hematoma, which is certainly not the case.

MS. EFFMAN: As a chronic --

MR. FROST: That's the problem, is you don't have any proof. That's the problem. Even if they were caused, and they are frequently caused, most of the time, by trauma, you don't have any proof.

THE COURT: You can question the Doctor as to these conditions. Okay? I will give the defense the opportunity to object if it appears she's speculating. I agree with you, depending on the exact question and answer, it may cross that line. You may certainly object at that time, if you think it's improper speculation.

MR. FROST: I believe she's already crossed the line, because she's volunteered the preexisting head injury. She's volunteered it. This her testimony, and I

think that testimony should be struck. It's without proper foundation and it's speculative.

THE COURT: Do you recall the specific answer that she's given?

MS. EFTMAN: It was the last question or two s was asked.

(Requested question and answer were read back the Reporter.)

THE COURT: That is where the Court is confuse When she says preexisting head injury, is she talking about within the 13-day period of time? That's how I understand it.

MR. FROST: If that's the case --

MS. BOOK: I will ask that question. Your Honor, my argument still stands; that even if she's talking outside of the 13-day period, this is an issue brought up by the defense. The Doctor should be able to say she doesn't see any natural occurring causes.

THE COURT: And she can testify that these conditions, because the defense did open that door, that these conditions are not naturally occurring. Whether sh can take it a step further and say they were caused because of blunt force trauma or this or that, that, I believe, falls in the realm of speculation. I will reserve judgment on that decision until and unless a

question is asked, and the defense may object at that time. But as far as her testifying that certain conditions were not naturally caused, that's appropriate, I believe, and you can ask that

(Proceedings continue in open court as follows:

THE COURT: You may proceed.

Q. Doctor, just to clarify for a moment, when you say that [redacted] had head trauma and, therefore, would have been more susceptible to the streptococcal pneumonia, are you speaking about head trauma that occurred within that week of September 21st?

A. Yes. In the preceding week, you mean?

Q. Correct?

A. Yes.

Q. Between the time period of September 10th and September 21, 2008?

A. Yes.

Q. Explain to us how someone who has head trauma would be more susceptible to something like streptococcal pneumonia?

A. Well, one is that the immune system is very complex, and the central nervous system, the brain and nerves play a role in modulating the immune system and making a good response. Second, if he had even a partial loss of consciousness, aspiration of contents into his lungs, say from his upper airway, that could lead to infection. Third is kids

with subdurals can actually get the subdural secondarily infected. That is the bacteria in the blood, and they go ooh, this is a nice place to land, because that subdural blood is very high in protein. It's very warm. It acts almost like a culture, you know, that allows those bacteria a pleasant place to grow.

Q. Going back to the aspiration for a moment, can you explain to us what aspiration is and how that could lead to getting an infectious disease?

A. Well, normally --

MS. EFFMAN: I object to the second part of the question, speculative, Judge.

THE COURT: It's overruled.

A. Normally, your body does a very good job about keeping separate material that goes and comes from your stomach down in your esophagus from those things that go down to your lungs through the trachea. So, it has a very good gag reflex that makes sure that it protects the airway from foreign substances. And when you have a head injury, when your consciousness level is decreased, that gag reflex is impaired, and it essentially allows stuff to get down into the trachea and lungs that shouldn't get there in a normal situation, because normally, your airway is very protected by the body.

Q. Have you seen this in other cases you have consulted on?

A. It's very common, aspiration with head trauma, yes.

Q. And you testified that on a subdural hematoma, with the collection of blood in the head, you could be more susceptible to a disease. How is that?

A. Well, again, it's a collection of blood that is not circulating. It's kind of not available to the rest of the body. It's separated off. And if bacteria got in there, they are very happy there and would infect that fluid.

Q. So, would this bacteria come secondary to the head trauma?

MS. EFFMAN: Objection, leading.

THE COURT: Sustained.

Q. How would this bacteria come?

A. Well, again, it would just be a place, a nidus of infection, a place that is susceptible to becoming super infected, we would call it; in the same way as if your bladder doesn't work and you've got urine that's stagnant in your bladder, you are more likely to get super infected with bacteria and get a urinary tract infection. So, it's a collection of fluids that is just vulnerable to super infection.

Q. Is streptococcal pneumonia contagious?

A. Yes.

Q. If I told you that nine people lived in a two-bedroom apartment and one had a contagious disease of streptococcal

pneumonia, would you expect some of the other people living i
that apartment to also become sick?

MS. EFFMAN: I'm going to object. She's not a
infectious disease expert. She's not been qualified in
that.

THE COURT: Sustained.

Q. To your knowledge, did [redacted] [redacted] also have streptococcal pneumonia on --

MS. EFFMAN: Objection, relevance.

Q. On September 21, 2008?

THE COURT: Overruled.

A. No, he did not.

Q. Would you have done anything differently if [redacted] was in your care at Albany Medical Center Hospital in the time period of September 21, 2008?

A. I think the quality of care was excellent. They did a superb job in a very difficult situation.

Q. Do you know when [redacted] was pronounced death?

A. I think it was the 23rd about 11:00 in the morning, but they kept him on the ventilator because he was a candidate for organ donation.

Q. Was there anything further they could have done for [redacted] [redacted]?

A. By the time he got to the hospital, he was so ill that I don't think that he was salvageable. Perhaps if the

night before, when he first starting having breathing difficulties, they would have sought care, he could have been saved, but by the time he got to the hospital, he was very terminallyill.

Q. Was there anything -- what did the Albany Medical Center doctors feel had caused this baby's death?

A. Head trauma.

Q. Dr. Jenny, are you familiar with the inner workings of the skull and the brain and its layers?

A. Yes.

Q. Would it be helpful to you, in explaining the insides of the skull to the jury, if you could come down and draw a diagram?

A. Yes.

MS. BOOK: Your Honor, I would ask that the witness be allowed to step down and draw a diagram of the skull and the brain?

THE COURT: You may.

A. I like to think of the head as an onion with layers that come from the outside in. If you took a slice right here and just cut the skull in half and then looked at how those layers were in the onion, like cutting an onion in half, you could tell how the layers relate to each other. And I'm a terrible artist, so I apologize. But you have the skull, which is the brain box, the hard part, and then outside the skull,

you have the scalp, which is the outer layer of the onion, th skin of the onion with the hair on it. And when we talk abou subgaleal hemorrhages, those are hemorrhages under the scalp. That's subgaleal (drawing).

Then you can also have hemorrhage and bruising on t outside layer of the skull. So, there's a thin membrane just right on the outside of the skull that's called the periosteur but you can also have actual bruises on that bone itself. So, those are periosteal bruises. And then inside the skull, you have this very thick membrane that protects the brain. That's referred to as the dura. And in the operating room, it actually looks like -- kind of looks like Naugahyde or plastic It's thick and it's tough, and the idea of the dura is to protect the brain itself. And then inside the dura, you have very delicate layer that kind of looks like tissue paper, but it's very thin and delicate and vascular, and that's called th arachnoid, the arachnoid membrane. And the arachnoid is, again, very delicate, as opposed to the dura, which is very thick. And then inside the arachnoid, you have, actually, the brain tissue itself. So, then you have the brain.

And then between the dura and the arachnoid, that's actually not a real space in a healthy person. There's really no space there, but there are vessels that cross that space, and if those vessels get cut or torn, you can end up with a bleed between the arachnoid and the dura, and that's called a

subdural bleed or a subdural hemorrhage. And then between the arachnoid and the brain, there is clear fluid called cerebrospinal fluid, or CSF, that circulates in that area and kind of bases the brain in fluid, and that fluid actually circulates up inside the brain, the reservoirs inside the brain, and circulates back down, and it actually circulates down to the base of the spinal cord.

So, you have clear fluid normally circulating from inside the brain, around the brain, down the spinal cord, and back up that's continually renewed that provides nutrients and provides protection for the brain tissue.

So, if this is the arachnoid and this is the brain, we talk about bleeding in there as subarachnoid bleeding. So, kind of where in the onion the blood collects, that's how we describe where that pathology is. You can actually also get bleeding within the brain tissue itself, which is an intracerebral hemorrhage, and that would be like, for instance, when people have strokes, they generally get bleeding right inside the brain itself and often it breaks out into the subarachnoid space, as well. Those are the kind of various spaces, but a subdural bleed is between the dura and the arachnoid in a space that usually isn't there, unless somehow those vessels get disrupted and that blood collects.

Q. Can you tell us what sutures are and where they would be found? Are they really like stitches?

A. Well, when you are born, you don't have a brain box One, you would never make it down the birth canal if the skul was one big box. And in the first year of life, the brain doubles in size. So, if babies were born with a skull like ours, there would be no room for brain growth, and they wouldn't be very smart. So, nature has allowed for that intense brain growth to occur by having the baby's skull be plates of bone that are connected with kind of bristles, connective tissue, cartilage. So, that allows for expansion the skull when the baby's brain grows, and it also allows for squeezing of the skull when the baby goes through the birth canal.

So, after about three or four years, that skull becomes one solid bone, instead of plates of bone, and those areas that are between, if you look at, say, the baby's -- how am I going to draw this? If we are looking at the baby's head from the top, and there's the soft spot and here's the nose, there will be sutures going down this way, and there will be sutures going down here (indicating) and sutures going to the back. There's several of these plates of bone that are connected by these sutures, and then that allows for rapid expansion of the size of the brain, at least until three or four years of age.

Q. Is there another way the sutures could be spread, other than the brain growth?

A. Obviously, if you have a brain tumor, you can spread your brain sutures, or you have hydrocephalus, which is water on the brain, which is something kids are born with. Their heads get real big. If you have chronic subdural bleeding, the head can grow quite miraculously large, because it expands to decrease the pressure. And if you have cerebral edema, or swelling of the brain, it will spread out the sutures and expand that way.

Q. Are you familiar with the autopsy report and what the findings were listed inside of Matthew's skull?

A. Yes.

Q. Could you show us in this diagram where Matthew had injury?

A. Well, he had severe swelling of the brain tissue. He had cerebral edema, which would mean that the brain swelled up, and very large, and filled up the space and caused increased pressure in his head. He had bleeding over the top and the sides of his head near the front in the subdural space.

Q. Did he also have subgaleal injuries?

A. He also had evidence of impact injuries underneath his scalp. So, when they peeled back the scalp, they found bruises, spots of bruising and bleeding underneath his scalp from impacts, and they also found bleeding and bruising on the outside of his skull from impact.

Q. Now, you say from impact. What does that mean?

A. Well, it means that something hit the head and caus those blood vessels to rupture and caused bleeding and bruisi outside of the skull.

Q. Could that bleeding and bruising outside the skull naturally occurring?

A. If you had fallen out of a window or had a bad fall yes, but there was no history of other trauma.

Q. And is it consistent with a baby being hit against a mattress?

A. It would depend on how hard the mattress is and how hard they were thrown and how far they fell from.

Q. Would it be consistent with being hit against a crib

A. Yes.

Q. And would it be consistent with being dropped at least 15 inches into a crib?

A. Again, it would depend on a lot of different factors

Q. Thank you, Doctor. You may have a seat.

(Diagram marked People's Exhibit 36 for identification.)

MS. BOOK: Your Honor, at this time, I'm going to offer People's 36 into evidence.

MS. EFFMAN: I'm going to object. That's a demonstrative aid.

THE COURT: I agree. I'm not going to allow it to be received in evidence.

MS. BOOK: Thank you, Your Honor.

Q. Dr. Jenny, you testified that you reviewed the autopsy report in this case?

A. I did.

Q. Can you tell us what findings were listed?

MS. EFFMAN: Objection. The document speaks for itself. It's already in evidence, Judge.

THE COURT: Overruled.

A. The child had subgaleal hemorrhage under the scalp. He had hemorrhage on the outside of the bone, the skull bone. He had severe cerebral edema, had old and new subdural hemorrhages, had, at the time of autopsy, some pneumonia in his lungs. He had some areas of his heart where lack of oxygen had led to dead tissue, same with his testicles. He had many needle sticks and therapeutic things done to him that were noted on autopsy to try to make him better, and he had absence of his kidneys from a surgical incision.

MS. EFFMAN: Your Honor, I'm going to object and move to strike that answer. There's no testimony in this case that there was lack of oxygen in the testes that caused bleeding in the testes, Judge.

THE COURT: Ms. Book?

MS. BOOK: Your Honor, the Doctor is asserting her opinion. I'm going to fully explore it more, but she certainly can state her opinion as to why it was there.

THE COURT: Objection is overruled.

Q. Let's start with the heart scarring. Can you expla why [redacted] would have had heart scarring?

A. Well, any time you have -- you are not breathing an your heart is not going, you can have tissues die. It doesn' take long. It takes a few minutes for a tissue to die if it doesn't have access to oxygen, and the autopsy report said th the findings were consistent with hypoxic injury.

Q. What are macrophages?

A. They are vacuum cleaners. They are the cells the body sends in to clean things up.

Q. What type of things do they clean?

A. They can clean up damaged tissue. They can clean up old blood. They can clean up, you know, anything that's kind of left over, debris in the tissues that shouldn't be there. Macrophages come in and ingest it and digest it and then carry it away from the diseased tissue.

Q. To your knowledge, were there macrophages present in [redacted]'s head?

A. It wasn't discussed specifically, that I recall, in the autopsy report, and I'm not a neuropathologist, so I don't feel comfortable giving opinions on neuropathology.

Q. Okay. Thank you, Doctor. Was there evidence of organ donation?

A. Yes. He had had two kidneys removed.

Q. If this baby had died from overwhelming septic shock

would you expect that these organs would have been able to be harvested?

A. It certainly wouldn't have happened in my institution.

Q. What opinion did the medical examiner have about what caused this child's death?

A. He said that it was homicide from head trauma.

Q. Are retinal hemorrhages significant in light of this finding?

A. Well, there's certainly hundreds of things that cause retinal hemorrhages. This child had very extensive retinal hemorrhages, and those are commonly seen in children with head trauma.

Q. Now, talking about the older subdural hematomas for a moment, do you have an opinion as to whether these hematomas were naturally occurring or whether they were the result of trauma?

MS. EFFMAN: Objection, lack of foundation.

THE COURT: Overruled.

A. Well, they don't occur naturally. I mean, there has to be some type of event that causes that subdural space to fill with blood. So, no. They would not have been naturally occurring.

Q. And Doctor, did you find that they dated back to birth?

A. I am not capable of dating them. There was no evidence that they were present at birth, and there was no evidence of abnormal head growth in this child that would have indicated accumulating subdural blood.

Q. Doctor, based on a review of all of the records in this case, did you agree with the medical examiner's findings?

A. I did.

Q. Knowing what you know about the mother's condition during pregnancy and the pregnancy complications, does that change your opinion in any way?

A. It does not.

Q. Knowing how the child presented to Samaritan Hospital the morning of September 21, 2008, does that change your opinion in any way?

A. It does not.

Q. Knowing what you know about the child going to Samaritan Hospital and a review of the records from September 13, 2008, does that change your opinion in any way?

A. It does not.

Q. Knowing what you know about the child likely being septic or at least having streptococcal pneumonia, does that change your opinion in any way about the cause of death?

A. No, it does not.

Q. Is it likely that a child who is beyond the point of medical intervention at 9:00 a.m. due to overwhelming septic

shock would have taken a bottle at 3:00 or 4:00 in the morning?

A. I think it's unlikely.

Q. And that if a child were to have died from septic shock, overwhelming septic shock at 9:00 a.m., is it likely he would have been responsive at 3:00 or 4:00 in the morning and running a fever of only 100.4?

MS. EFFMAN: Objection, leading, Judge.

MS. BOOK: I asked a question. She's free to state yes or no.

THE COURT: It's overruled.

A. 100.4 is not a high fever. I would expect if he had septic shock or if he had severe sepsis at 4:00 in the morning, he would have had a very high fever.

Q. Could a head injury ravage you in a matter of a few hours?

A. Could you say that again?

Q. Could a head injury ravage you within a matter of a few hours?

MS. EFFMAN: I object, speculation, no foundation for this.

MS. BOOK: The Doctor has been --

THE COURT: The objection is overruled.

A. A head injury can have a variety of courses. It can kill you immediately, as we see in people in automobile accidents. Some people will have a gradual downhill course

that happens over many hours. Some people will have a course where they get worse and then get a little better and then ge worse again, and then go downhill. It really depends on the nature of the injury and the severity of the injury and the condition of the person who's been injured and what kinds of strikes they have in terms of dealing with the head injury.

Q. Now, relating that to [redacted] [redacted], how severe wa his head injury?

A. Well, obviously, he was fighting. He had a very severe injury.

Q. Did you review the ten-page statement given by Adri. [redacted] to the Troy Police Department?

A. I did.

Q. Doctor, I want to talk about specifically where in this statement the Defendant says that, after he threw the child on the bed on Saturday night, the child began wheezing. Could you talk to us about that wheezing and what that would have meant?

A. That's a very common thing that happens after a chil sustains a head injury. Their breathing is not well regulatec by their nervous system. Their airway kind of shuts down and they make kind of sounds (indicating), very unusual sounds. That's frequently reported after children sustain head injury. It also means that, beginning at that point in time, at least intermittently, the child didn't have effective oxygen going t

his system, because he was having trouble ventilating and trouble getting enough air into his lungs to effectively keep his tissues healthy.

Q. Was this significant?

A. Oh, yes. He should have gone right to the doctor at that point. He could have been salvaged.

Q. And in your expert opinion, are the injuries to this child consistent with what's enumerated in the ten-page statement of Adrian [redacted]?

A. I would say so, particularly because there was repetitive injury, and we know that --

MS. EFFMAN: Objection. She hasn't been qualified as a biomechanics expert, the statement in her testimony as to --

THE COURT: I think a sufficient foundation has been laid due to the Doctor's experience and qualifications. I will overrule the objection.

Q. You may continue.

A. We know that when infants sustain multiple head injuries, they are much more vulnerable to a bad outcome than, say, an adult. I mean, anybody who gets two or three head injuries, it's worse than if they get one head injury. But the data is very clear that when you have animals in a laboratory and if they sustain one injury, if they are an infant, a second injury is much more devastating. And so, there seems to be a

priming effect that occurs when they are injured more than on time, so that they are just much more vulnerable biologically to a second injury in terms of the way their brain acts, in terms of the maintenance of blood pressure, in terms of the amount of chemicals released from the brain that cause brain damage, in and of itself. So, infants are particularly vulnerable to repetitive events when it comes to head injury.

MS. EFFMAN: I'm going to object and move to strike the answer. She's not a neurologist. It's beyon her expertise.

THE COURT: Overruled.

Q. Would the force of a large man, say 500 pounds, five-foot-nine, throwing an infant from shoulder height down to a mattress 17 inches off the ground produce this type of injury?

MS. EFFMAN: I'm going to object, Judge; again, qualifications have not been established. She's not a biomechanics expert. It's beyond the scope of her expertise. May I voir dire the witness, Judge?

THE COURT: You may.

VOIR DIRE EXAMINATION

BY MS. EFFMAN:

Q. Doctor, you are not a neurologist; correct?

A. I am not.

Q. You are not a neurosurgeon?

A I am not.

Q. You are not a pathologist, either; correct?

A. No, I'm not.

Q. You are not a specialist in infectious diseases; correct?

A. No, I'm not.

Q. And you are not a biomechanical engineer; correct?

A. No, I'm not an engineer.

Q. You have no degrees in engineering; correct?

A. I do not.

Q. And you don't have a degree in physics, either; do you?

A. No, I do not.

Q. And you are not a member of any professional societies for biomechanical engineers?

A. I'm a member of the Society of Automotive Engineers and the Medical Society on Automotive Trauma.

Q. Are you a member of any other societies for biomechanical engineering?

A. No, I'm not.

Q. Doctor, what are Newton's three laws in motion?

A. That an object gets set in motion by a force, and that the force of gravity acts on an object as it moves along, and that every action has a reaction.

Q. Are you a member of the American Society of

Biomechanics?

A. No, I'm not.

Q. Member of the Society of -- International Society c Biomechanics?

A. No, I'm not.

Q. And, in fact, previously, Doctor, you disclaimed -- you have disclaimed in the past of not being an expert in biomechanics; correct?

A. I am not a biomechanical engineer. I have done research with a biomechanical research team at a laboratory i Japan for five years and have been very actively involved in research agenda, but I am not a biomechanical engineer.

Q. Certainly, you tell people when they are looking to hire you, you tell them that you are not a biomechanical engineer; correct?

A. Yes.

MS. EFEMAN: Nothing further, Judge. I object to this line of questioning, given the fact she's not a biomechanical engineer. If the DA wants to put in proof of that, they are required to call a biomechanical exper particularly someone with a Ph.D. in biomechanics, Judge.

THE COURT: Do you wish to be heard?

MS. BOOK: Yes, I do, Your Honor.

MS. EFEMAN: May we approach?

THE COURT: You may.

(Sidebar discussion held as follows:

MS. BOOK: Your Honor, Dr. Jenny has 40 years treating patients with head trauma. She certainly can state, in her expert opinion, not as a biomechanical engineer, not as someone who is involved in physics, which is obviously well pointed out, but as an expert within her medical field, she can certainly state whether this type of injury is consistent with this type of act. She's certainly had plenty of experience and training with respect to this over the years.

MR. FROST: She's already testified in many areas that are beyond her expertise She's not a neuropathologist. She's not a neurosurgeon, and now she's going to be testifying to the G-forces. And the fact that he's 500 pounds doesn't mean diddly-squat. The G-forces that are required to produce this type of injury, there's absolutely no foundation for her to be able to testify to that, Your Honor. We have information, for example, that G-forces, a hundred G-forces is a hundred times the force of gravity, is the threshold for this type of injury. She's simply not the person qualified to give this type of testimony, as I said. As I have indicated, we have had a neurosurgeon in this case. We didn't hear this type of testimony. She's covered the same areas of testimony. We have had a pathologist. Now she's testifying as a

pathologist. She's testifying to everything but, you know, an everyday pediatrician. That's what she's testifying to. We object, and I move to strike her enti testimony as to that fact. It seems to me that the woma is here as a one-size-fits-all that can testify to -- wh can testify in any area that may possibly affect [redacted], and she's already testified to multiple disciplines that she is admittedly, by her own admission not qualified to testify. So, we very strongly object.

THE COURT: The motion to strike her entire testimony is denied. She -- the Court has ruled upon objections as they come from the defense, and the Court, as indicated, has found that she has testified within her realm of knowledge as based upon her review of the record in the case. So, that motion is denied. Did you want to be heard further?

MS. BOOK: Two quick points, Your Honor. One is that Dr. Jenny has freely admitted during the course of this trial when something is outside of her expertise, when she doesn't feel comfortable testifying to it. She obviously says she can render an opinion within her knowledge and expertise with respect to this issue. Secondly, I argue this is a weight versus admissibility issue. She has testified she doesn't know anything about G-force and biomechanics and engineering. I think the

jury can take her opinion for what it is, and it's clearly pointed out what she is an expert in and not an expert in.

MS. EFFMAN: This is the exact subject matter that requires the testimony of a biomechanics expert. It's clear that it requires that. She's not an expert in that. Certainly, the people that the DA has felt might be qualified, such as Dr. Sikirica, the Court allowed him to testify to these things. She's not a pathologist. This question that Ms. Book is posing is beyond her expertise, and I would object to her being allowed to answer that question as beyond her expertise.

THE COURT: I understand both sides' position. She is admittedly not a biomechanical engineer. She has testified she's been involved in extensive research. The Court notes during her earlier testimony, she indicated that she has published on the topic of biomechanics of head injuries. Therefore, the Court finds that there is a sufficient foundation for her to testify in this regard. Of course, the defense may cross-examine her on any extent of her knowledge or expertise, but from a foundational perspective, the Court finds that a proper foundation has been established, and she will be allowed to testify in this regard.

MR. FROST: I also might add, she only got two of those three laws right.

THE COURT: I didn't know any of them.

(Proceedings continue in open court as follows

THE COURT: You may proceed.

MS. BOOK: Thank you, Your Honor.

DIRECT EXAMINATION

BY MS. BOOK: (Continuing)

Q. Dr. Jenny, would the force of a large man, perhaps around 500 pounds, five-foot-nine, throwing an infant from shoulder height down onto a mattress 17 inches down off the ground, could that produce this type of injury?

A. Yes.

MS. EFFMAN: Objection, speculative.

THE COURT: Overruled.

Q. Sorry, Doctor?

A. Yes.

Q. Could this type of injury be consistent with a baby getting its head banged against a hardwood railing?

MS. EFFMAN: Objection, speculative.

THE COURT: Overruled.

A. Yes.

Q. Would you expect to see neck strain on this baby?

A. It would depend on the nature of the injury. We certainly don't see it in all cases.

Q. Do you have an opinion about if the acts listed in the ten-page statement by the Defendant, Adrian Thomas, were

performed and true, whether that would have caused this child's death?

MS. EFFMAN: Objection, speculative.

THE COURT: Overruled.

A. Yes, it could have.

MS BOOK: Thank you, Your Honor Nothing further.

THE COURT: Thank you.

CROSS-EXAMINATION

BY MS. EFFMAN:

Q. Dr. Jenny, you have testified a lot of times in Family Court; correct?

A. Yes

Q. And you have done a lot of that in the State of Rhode Island, I assume, since that is where your hospital is located?

A. Yes

Q And fair to say you have testified hundreds of times in the State of Rhode Island that children don't lie when parents -- when they say their parents abuse or injure them; correct?

MS. BOOK: Objection. I don't see the relevancy here, Your Honor.

MS. EFFMAN: It goes to her credibility Judge.

THE COURT: Overruled.

A. No, I have not.

Q. It's your testimony that you don't repeatedly go i court and testify that children don't lie concerning their complaints about their parents?

A. No.

Q. You dealt with a case in Rhode Island several years ago involving a child named Michelle DePeena (phonetic). Do you recall that one?

A. No.

Q. Do you recall the case where the child had been in shower with her mother, and the mother got out of the shower, and after the mother got out of the shower, the child turned the water off in the shower, and the child ended up with a bu from the water. Do you recall that case?

A. No, I don't.

Q. And when you testified in that case, it went to trial, and do you recall Judge Michael Forte finding that you testimony lacked credibility? Are you aware of that, Doctor?

MS. BOOK: Objection.

THE COURT: Overruled.

A. No. I don't recall that.

Q. Are you aware that same case involving Michelle DePeena, Jasmine Lisboa, Evander Lisboa, and Tyler Lisboa, (phonetic) based on a hearing on September 7, 2001, before Justice Michael Forte, that he also found that you had gone beyond the bounds of your expertise? Are you aware of that?

A I don't recall the case. I'm sorry.

Q. And, certainly, you are not aware that Judge Forte found that your testimony lacked credibility?

A. No, I don't.

Q. And, certainly, are you not aware that Judge Forte found on the matter of Michelle DePeena, Jasmine Lisboa, Evander Lisboa and Tyler Lisboa, that you had gone beyond the bounds of your expertise. You are not aware of that?

A. No.

Q. Let's talk about the case of Diana Owen. Do you recall Diana Owen?

A. No, I don't.

Q. You accused her back in -- she's a mother Back in 2006, she brought her child, Brianna Rose, to Hasbro Hospital, and you accused her of Munchausen's by proxy. Do you remember that name, Diana Owen?

A. I actually never saw that patient. One of my colleagues treated that patient.

Q. In fact, you were involved, because you were interviewed by the Boston Globe about the case?

A. Yes. I was interviewed on the case.

Q. And in that case, your hospital, who -- you supervise the staff there; correct?

A. Yes.

Q. And your staff and you discussed the case and felt

that Ms. Owen had Munchausen by proxy; correct?

A. No. We said the child was medically abused and was receiving unnecessary and harmful medical care at the behest of her parents.

Q. And do you recall the mother came to the hospital with complaints her child had multiple episodes of vomiting, and that was her concern?

A. Actually, the child had had multiple episodes of vomiting and episodes of stopping breathing.

Q. In fact, your hospital staff filed a claim of medical abuse with the Department of Social Services; correct?

A. That's right.

Q. And in fact, the mother was escorted out of the hospital; correct?

A. Yes, she was.

Q. In fact, the child remained at the hospital after Ms Owen was escorted out; correct?

A. That's right.

Q. And after the child remained at the hospital, the child in fact -- the child had episodes of vomiting; correct?

A. Actually, the child did very well. She had been under constant observation for several days with her mother, and there were two, you know, 20, 30 second periods where mother left the room; one, the child stopped breathing, and on the child had a bad vomiting episode. Otherwise, she was fine

And once the mother left the hospital, the child had no complications and did very well.

Q. You are aware that the records provided to the Boston Globe and the article you were interviewed about indicate that Hasbro staff reported vomiting or mouthfuls of spit up about a dozen times, and that the girl's lips had turned blue? This was after Owen had left the hospital. Are you aware of that information provided to the Boston Globe?

A. The child had a pulse oximeter on the entire time, and her oxygen level was normal throughout. So, no, she had no blueness. She did have a little bit of reflux, which is very normal for infants when they spit up mouthfuls of formula. That's a normal part of being a baby.

Q. So, if the Boston Globe had retained records that indicated that your hospital staff reported vomiting or mouthfuls of spit up about a dozen times, as well as cases where the girl's lips turned blue after the mom left the hospital, that wouldn't be accurate?

A. That was not accurate.

Q. And in fact, Brianna Rose, when released from the hospital, went into foster care; correct?

A. She was with a relative.

Q. Was not returned to her mother?

A. Not for two years.

Q. And are you aware that two psychiatrists, or one

psychiatrist and one psychologist, and one of them was a psychiatrist from Harvard Medical School, did an evaluation c Ms. Owen and found there was no evidence of Munchausen's by proxy. Are you aware of that?

A. We did not diagnose Munchausen by proxy.

Q. Are you aware that two professionals - one a psychiatrist and one a psychologist - evaluated Ms. Owen, as ordered by the Department of Social Services, and they found the child abuse claims were ridiculous and not supported by a evidence? Are you aware of that?

A. I know she was evaluated. I don't know the outcome of those allegations.

Q. And you are aware, based on your hospital filing th faulty medical abuse claim, that this mother was kept out of the life or from being alone with her child for 11 months out of this child's life. Are you aware of that?

A. This child had many very worrisome episodes in the care of her mother. She was normal out of the care of her mother. Her mother told us things like she had been the foste mother for cannibals, for children who eat other children. Sh had some very unusual mental problems that kept her from accurately assessing her child's illness and getting an inordinate amount of very dangerous medical care for her chil that wasn't indicated based on her false statements.

Q. But bottom line is, Doctor, the Boston Globe obtain

records from your hospital that supported the mother's claims that the child had vomiting at your hospital when the mother wasn't there, and you dispute that; correct?

A. I dispute that the child did not have vomiting.

Q. And Doctor, are you aware that this child, because of the complaint you filed, your hospital filed, this child was removed from the custody of her mother and kept from her mother for 11 months of the first two years of this child's life?

MS. BOOK: Objection, asked and answered.

THE COURT: Sustained.

Q. Your hospital diagnoses ten cases of Munchausen by proxy a year?

A. We do not diagnose any cases of Munchausen by proxy

Q. You would agree that's a very rare disorder or diagnosis?

A. It's not a disorder that exists.

Q. Actually, it's disputed; correct?

A. It's not a disorder that exists

Q. How many times have you testified for the defense in a criminal case, Doctor?

A. Well, I don't refuse to review records. Obviously, if you review a record and you say -- "Do you think it's child abuse," you are not asked to testify. I have testified about four or five times in criminal cases.

Q. When was the last time you testified for the defense

in a criminal case?

A. Last year.

Q. And how many times have you testified for the prosecution in a criminal case?

A. Many times. I have also told the prosecution I wou not testify because I didn't think it was abuse. I did that last week.

Q. And, in fact, you testified hundreds of times for t prosecution in a criminal case?

A. Yes.

Q. How many times have you testified this month in Family Court?

A. Twice, I think.

Q. And what did you earn for those appearances in Fami Court?

A. Nothing.

Q. Pardon me?

A. No money. I mean, I get my regular salary, but -- take time out of the office but I don't get --

Q. Is that part of your duties at Hasbro Hospital?

A. Yes.

Q. Have you testified in any private cases in Family Court this year?

A. Not that I recall.

Q. How many times have you testified -- how many times

do you testify a month in prosecution cases?

A Once a month average, mostly in Providence, sometimes outside of Providence.

Q. What was your percentage of cases that you testified for the prosecution versus the defense; 95 percent, 98 percent?

A. Probably 90, but what generally happens is, if the prosecution sends me the case and I don't think it's a valid case, they don't call me. The same with the defense; if I think it is a valid case, they don't call me

Q. So, fair to say, you testify at least once a month for the prosecution in a criminal case?

A. Probably not, probably once every couple of months

Q. And what is your hourly rate, generally?

A. $300 an hour.

Q. And do you have a maximum daily rate?

A. 3,000.

Q. In fact, over the past year, starting with January until now, how much money have you made testifying in criminal cases?

A. I honestly don't know.

Q. In how many cases have you testified from January until now?

A. That I got paid for?

Q. Yes?

A. Four, maybe.

Q. And in each one of those, did you earn 3,000 plus your hourly record review rate?

A. Yes.

Q. And last year, how much money did you make testifyi for the prosecution?

A. You know, I don't know. I do four, five cases a year. I get, you know, five to $8,000 a case, except I did d several years -- four years ago, I testified for three weeks before the Supreme Court in London, and obviously that, when you are gone for three weeks, they pay for three weeks' worth of work.

Q. What were you paid for your -- how many hours of record review did you do in this case before testifying?

A. In this case?

Q. Yes?

A. Probably about eight to ten, I would guess.

Q. That's at $300 an hour; correct?

A. Yes.

Q. And then you charged your daily rate of 3,000 for your testimony being here today; correct?

A. I left yesterday at about noon, and I hope to get home for dinner tonight.

Q. You are going to be paid 3,000 or more for that time

A. 3,000 for 24 hours, and then $300 an hour.

Q. Do you do private evaluations of children?

A. Private evaluations?

Q. Hired by people that work in Family Court, divorce matters, child custody disputes? Do you get involved in that?

A. I do.

Q. How many of those child evaluations do you do a year?

A. One, max.

Q. That s not a big part of your practice?

A. No, it's not.

Q. Besides when you are testifying and doing an evaluation and record reviews, you are also paid a salary by Hasbro Hospital?

A. I am.

Q. What is your salary at Hasbro Hospital?

A. My salary is about $197,000.

Q. As part of the case, you were given -- part of the documents you were given concerning this case, Doctor, you were given a ten-page statement from Adrian Thomas, correct which you have already testified about?

A. Yes.

Q. And, obviously, you relied upon that and reviewed that in rendering your opinions here today; correct?

A. That was part of the record that I reviewed.

Q. And fair to say, if you hadn't been provided with a statement by which Mr. Thomas purportedly admitted to committing certain things, that may have changed your opinion

in this case; correct?

A. I think it was still my opinion that this child die of a head injury.

Q. Well, Doctor, it's hard to know that, since you already read his purported statement. Fair to say your opini might have been different if you had not been provided with a admissions from anyone concerning any acts; correct?

A. I think it's difficult to say.

Q. So, you can't really answer that question; correct?

A. It's kind of theoretical. I don't know how that would affect things.

Q. Well, you have already been influenced by an opinior correct, by a statement; correct? You have been given a ten-page statement to review as part of a package of a case; correct?

A. That's right, yes.

Q. So, you don't know what, if any, impact that statement -- strike that. You don't know what, if any, impact that statement might have taken away from your opinion if it hadn't been provided to you by the DA's Office; correct?

A. I think it's difficult to say. It's speculation.

Q. And, certainly, you reviewed it and you relied on it in evaluating this matter; correct?

A. I reviewed it.

Q. Now, in terms of the records you reviewed, you

testified about reviewing records from Samaritan Hospital from September 13, 2008, concerning the mother going to the hospital with a report of a rash. Are you familiar with those records?

A. Yes

Q. And in fact, Doctor, are you aware that when the mother went to the hospital that day, she reported her child had had a fever the day before? Are you familiar with that?

A. I don't recall

Q. If the records stated that, would that refresh your recollection?

A. That would.

Q. I draw your attention to Defendant's Exhibit C in evidence. I ask you to review that, Doctor. And when you have had a chance to review it and refresh your memory, I ask you to look up. Fair to say, Doctor, the records for September 13, 2008, reflect more than just a complaint of a rash. The mother also complained the child had a fever the day before, which would be the 12th of September, 2008?

A. She said the child had a rectal temperature of a hundred, which is a normal rectal temperature for an infant. So, he did not have a fever.

Q. Doctor, would you review the following page of the document? The record reflects that mom reported the child had a fever at home the day before; correct?

A. It just says fever. And again, if it's a hundred,

that's normal.

Q. Irregardless, the record reports mom complained of a fever; correct?

A. Yes.

Q. In terms of the ultrasound Ms. Book asked you questions about from September 14, 2008, fair to say that was not read by a pediatric radiologist?

MS. BOOK: Objection, Your Honor. There was no ultrasound September 14th.

Q. May 14, 2008?

A. I don't know. It was read by a radiologist, but I don't know whether it was a pediatric radiologist or not.

Q. If it was read by a technologist, that's certainly not a radiologist?

A. Oh, I'm sure it was read by a radiologist. They would not not have a radiologist read an ultrasound.

Q. And as you sit here today, Doctor, you are not aware whether or not that person is a pediatric radiologist?

A. I don't know.

Q. And would you agree that the most qualified person to read an ultrasound or a CAT scan of a child is a pediatric radiologist?

A. I think it depends on the training and experience of the person who is doing the reading, and I don't know the doctor who read it. So, I don't know what that person's

training or experience was.

Q. And you would agree, Doctor, that a CAT scan is more sophisticated than an ultrasound; correct?

A. Sophisticated meaning?

Q. It's more overall diagnostic; correct?

A. Well, it certainly diagnoses lesions in the back of the head that can't be determined by ultrasound.

Q. Certainly, isn't a CAT scan sort of the gold standard for conducting a head examination internally; correct?

A. Well, it depends on what you are looking for.

Q. Would you agree it's a better method or better means of getting a thorough and accurate picture of a child's head, a CAT scan?

A. Well, again, it depends on what you are looking for. If you are looking for posterior fossa and masses and bleeding it's obviously critically important, because you don't see those with an ultrasound.

Q. Obviously, a CAT scan would be more useful to a neurosurgeon than another doctor; correct?

A. I would assume that by the time the patient got to a neurosurgeon, they would need to have a CAT scan or an MR.

Q. Obviously, if someone wants to do a thorough examination or evaluation of a child's cranial area, the best way to have that done would be by a CAT scan; correct?

A. Well, it really depends, because CAT scans miss

subdurals, particularly in the first five to 10 hours after a injury, for example, and there's times when the ultrasound would be better than the CAT scan, times when the CAT scan would be better than the ultrasound, times when the MRI would be better than either, depending on what kind of lesion you a looking for.

Q. It's your testimony that a CAT scan can miss certai areas; correct?

A. I'm sorry?

Q. It's your testimony that a CAT scan can miss certai areas?

A. Well, the CAT scan doesn't have as much -- is not a accurate, like, for instance, for like brain masses as an MRI CAT scans are not perfect, and they don't show certain types bleeding.

Q. And you would agree that ultrasound is not perfect, either; correct?

A. No, it's not.

THE COURT: Ms. Effman, I'm sorry to interrupt Can I ask the attorneys to approach, please?

(Discussion off the record at the bench.)

THE COURT: Okay, members of the jury. We are going to take a break for lunch at this time. We will report back here at 1:45. Okay. Before you leave, I remind you, please do not discuss the case among

yourselves or with anyone else. Do not read or listen to any media accounts of this case. Do not visit any premises involved in this case Do not conduct any research regarding this matter. Do not request or accept any payment in return for supplying information regarding this case. Do not make any judgments regarding this trial until you have heard all of the evidence and been instructed as to the law. And if anyone attempts to improperly influence you, please report it directly to me without discussing it with anyone else first. Enjoy your lunch. See you back here at 1:45.

(Jury excused.)

THE COURT: Doctor, because you are still a sworn witness, I would just ask, please, do not discuss this case or your testimony with anyone, including the prosecution, during the break. Thank you. Now you are all set. Thanks.

(A luncheon recess was taken.)

THE COURT: Parties ready to proceed?

MS. EFFMAN: Yes, Judge.

COURT OFFICER: Jury entering.

(Whereupon, the jury entered the courtroom.)

THE COURT: Please be seated. Ms. Effman, you may proceed whenever you are ready.

MS. EFFMAN: Thank you, Judge.

BY MS. EFFMAN: (Continuing)

Q. Doctor, can you tell us, what is Munchausen's by proxy?

A. It's a condition that's been written about a great deal that, under current consideration, it's not considered a valid diagnosis. I wrote a book about it, actually, recently

Q. Can you tell us what it is, though?

A. Well, it was a condition where parents got excessive and unnecessary medical care for their children to the point where the children are harmed.

Q. And you stated previously in your earlier testimony that it's not a recognized disease or illness; correct?

A. Yes.

Q. Fair to say you refer to it as medical child abuse in your papers and writings?

A. Yes.

Q. And medical child abuse is the same thing as Munchausen by proxy?

A. Well, no. It's very difficult. It's a child receiving unnecessary and harmful medical care because of what their parents are telling the doctors or the actions of their parents, and sometimes the parents do things like poison the child or suffocate the child to get the child to the doctor. Other times, they just tell outrageous stories or exaggerate what's wrong with the child, but the child ends up being

abused, because they are getting dangerous medical care they don't need and, oftentimes, have unnecessary surgeries and very bad outcomes.

Q. And even though you don't recognize it, your hospital and your staff refer ten cases a year to the Department of Social Services in your state for Munchausen by proxy. Isn't that correct?

A. No. We talk about children who are being abused by the actions of their parents

Q. So, if the Boston Globe cited in their article back in 2006 that your hospital referred ten cases a year for Munchausen by proxy, the Boston Globe would be inaccurate?

A. They would be wrong. We don't use that term at all in our institution.

Q. And even though you don't recognize Munchausen by proxy, you recorded a tape for a Pediatric Update Series called Munchausen by proxy; correct?

A. Yes. But in that, we said the term should appropriately be medical child abuse, because Munchausen by proxy is very poorly defined. It's unclear whether it's a disease of the child or the mother. It's a bad, unclear diagnostic category.

Q. Either that or medical child abuse, essentially, you are saying in either scenario, the parent is requesting additional procedures to be done and you feel the child doesn't

need; correct?

A. Well, the point of medical child abuse is that the child is suffering, you know, getting spinal taps and IV's and sometimes dangerous tests and surgeries and unnecessary radiation and unnecessary medication because the parents are misrepresenting the child's signs and symptoms to the medical practitioner. The doctor is prescribing the appropriate medication given the history the parent brings, but the parent brings a history that is totally inaccurate and not supported by the facts.

Q. Were you paid for this audiotape you did for the Pediatric Update Series on Munchausen by proxy?

A. Gosh, I don't remember.

Q. Even though you don't recognize the term, you did do a tape about it; correct?

A. You know, we did a tape where we recommended getting rid of the term, because it's diagnostically inaccurate.

Q. Let's talk about the birth records for both [redacted] and [redacted] [redacted]. You testified here the only confusion in the birth records was the birth certificates; correct?

A. Well, that's what I understood. They identified [redacted] as the A baby and [redacted] as the B baby, but it turned out the opposite on their birth certificates.

Q. Isn't it true that under People's 13 in evidence, th records for Twin A, there is references to both [redacted] and

Matthew under the same medical record number?

A. Not that I recall.

Q. Are you aware that under the records, People's 12 in evidence for Twin B, there's references to both [redacted] and [redacted] [redacted] under the same medical record number?

A. I don't recall that. It seemed clear to me that one came out first and the other came out second. One was bigger than the other and the other had higher Apgar scores and was healthier than the other

Q. Would looking at the records refresh your recollection to the fact that there's names of both twins reflected under the same medical record number?

A. I don't remember

Q. Would looking at the records refresh your recollection, Doctor?

A. I assume so.

Q. I show you People's 12 in evidence and refer you to the discharge summary for the medical record ending in 12.

A. What am I supposed to see here?

Q. Doctor, doesn't the discharge summary for the medical record number ending in 12 on that page, doesn't it refer to both the name Matthew and the name [redacted] as to the same medical record on that piece of paper?

A. In this one, [redacted] is crossed out and it says [redacted]. I don't know who did that.

Q. On the top of the page, there is the name [redacted], and it's not crossed out; correct?

A. It says [redacted], Twin A.

Q. So, in fact, there's references to both twins' name under the same medical record number. Isn't that correct, Doctor?

A. I don't know what the other -- well, depending on who -- somebody scratched out [redacted] and put [redacted] on this The original record said [redacted]. I have no idea where that change was made.

Q. Would you agree the record that's in front of you that's in evidence has the name, one name crossed out and one name written in, and also the other child's name written on th same sheet of paper which is not crossed off; correct?

A. No. It looks like it says Hicks, [redacted], Twin A, and then it says patient name, twin, and the A is crossed out, and somebody put B, and then it says name, [redacted], and that's crossed out, and it says [redacted], and then it says Baby Boy [redacted], and that's crossed out, and it says [redacted].

Q. That same sheet of paper that I'm referring to, Doctor, it mentions both the names of [redacted] and [redacted] on the same piece of paper and under the same medical record number which is on the top left-hand portion of the document. Isn't that correct?

A. Right. Somebody scratched out [redacted] and wrote in

[redacted].

Q. I ask: No one scratched out the other name to clarify which twin was being referred to; correct?

A. On the top, it says [redacted], Twin A.

Q In fact, there is a reference to [redacted] and [redacted] on the same piece of paper on the same medical record number; correct?

A. Yes. Somebody crossed out the typed name and wrote in a name.

Q Thank you, Doctor. And Doctor, as far as you are aware, there's been no proceeding that's occurred to establish whether it's Twin A or Twin B that died or survived?

MS. BOOK: Objection, Your Honor, relevance.

THE COURT: Ms. Effman?

MS. EFFMAN: It's relevant. This jury is going to be seeing both medical records, because there's been no proceeding, and I'm asking, based on her familiarity with these proceedings, if she's aware there's been a proceeding to establish whether it was Twin A or Twin B that died or survived.

THE COURT: Overruled.

A. I have no idea that was any legal proceedings. I do know, according to the records I read, the mother identified Twin A as [redacted].

Q. As far as you are aware, there's been no -- you

haven't been advised of any type of court proceeding or proceeding brought by the hospital or any other person to correct these records and establish whether Twin A is [redacted] or Twin B is [redacted]; correct?

A. Not that I know about.

Q. Let's turn your attention, Doctor, to Samaritan Hospital. You were asked some questions about the differenti diagnosis done at Samaritan Hospital by Dr. Kardos. You testified earlier that it was sepsis that was on the list of differential diagnosis. In fact, it was septic shock that wa the first item written on Dr. Kardos' differential diagnosis. Isn't that correct, Doctor?

A. Yes.

Q. And septic shock is overwhelming sepsis; correct?

A. Yes.

Q. You testified earlier that when the child arrived tc Samaritan Hospital, the child had a temperature of 100.4. Is that your testimony here today?

A. That's what was reported. Well, it was reported by the mother that the child previously had had a temperature to 100.4.

Q. Doctor, are you aware that the records for Samaritan Hospital reflect, when the child got to the hospital, his temperature was 97.2 at 9:16 in the morning. Are you aware of that?

A. Yes, I was

Q. So, when you testified that the child arrived at the hospital not having an abnormal temperature, that was not accurate?

A. He didn't have a fever. He was slightly hypothermic.

Q. In fact, when he arrived, he was hypothermic and he remained hypothermic at Samaritan Hospital and Albany Medical Center; correct?

A. Yes

Q. And in fact, during the hour and a half he was at Samaritan Hospital, his temperature dropped nearly three degrees, correct, down to 94 degrees?

A. Yes. Essentially, he was more or less dead, or he had been for quite awhile.

Q. Now, Doctor, you are not aware of any blood culture taken for Malakai Thomas on the 21st of September, 2008; correct?

A. Not that I'm aware.

Q. And since there's no blood culture taken, you don't know whether or not Malakai Thomas would have been positive for streptococcus pneumoniae; correct?

A No, I don't, but it would be surprising if he didn't have a fever and wasn't ill.

Q. Since no blood culture was performed, Doctor, you don't know the answer to whether or not he was carrying the

organism streptococcus pneumoniae; correct?

A. He might have been carrying it in his pharynx, in hi throat, but I would be real surprised if it was circulating ir his bloodstream.

Q. And, in fact, you don't know, because you didn't evaluate Malakai Thomas on September 21, 2008; correct, Doctor

A. I did not.

Q. And besides this child being hypothermic, the child had a very low white blood cell count at Samaritan Hospital. Isn't that correct?

A. That's correct.

Q. In fact, his white blood cell count was a thousand. Are you aware of that?

A. Yes.

Q. He also had a low platelet count at Samaritan Hospital, as well. Are you aware of that, Doctor?

A. Yes.

Q. Also at Samaritan Hospital, he was experiencing respiratory failure. Isn't that correct?

A. Yes.

Q. He also was hypotensive, had a very low blood pressure Isn't that correct?

A. Lower than it should have been, yes

Q. In fact, while he's there, his blood pressure droppe significantly, didn't it, down to the 50's and the 40's?

A. Well, babies have much lower blood pressures than adults. So, a diastolic of 40 to 50 is not that worrisome. He had a dropping blood pressure and his blood pressure was lower than it should have been.

Q. And as a matter of fact, his blood pressure was of such a concern to the doctor there that she, in consult with another doctor decided to give the baby dopamine to improve his blood pressure? You are aware of that?

A. That's right.

Q. And that would have been given because she was concerned about the blood pressure; correct?

A. Yes.

Q. And you are aware that, within half an hour of this child's arrival to the hospital, that his blood was drawn for purposes of doing a blood culture for testing for bacteria; correct?

A. Shortly after arriving, yes.

Q. And you are aware that that blood culture came back, as you testified to earlier, as being positive for streptococcus pneumoniae?

A. That's right.

Q. That means, when this child arrived at Samaritan Hospital, he was already positive for the presence of the bacteria streptococcus pneumoniae; correct?

A. That's right.

Q. And you would agree, Doctor, that hypothermia, hypotension, low white blood cell count, low platelet count, are all consistent with the diagnosis of sepsis, septic shock correct?

A. Yes.

Q. And you are aware that when the child was transferr from the hospital, Dr. Kardos did a provisional diagnosis, in which she diagnosed the child as experiencing tachycardia and brachycardia (sic)?

A. I'm sorry?

Q. Are you aware that Dr. Kardos did a provisional diagnosis before the child was transferred from Samaritan Hospital to Albany Medical Center?

A. Of? I'm sorry. I missed the rest of the sentence.

Q. Brachycardia (sic), tachycardia?

A. Brachycardia?

Q. Bradycardia.

A. Bradycardia.

Q. And tachycardia?

A. Tachycardia is high heart rate and bradycardia is lc heart rate.

Q. Are you aware that she did a diagnosis of tachycardia?

A. Yes

Q. And that s often a sign of sepsis; correct?

A. It can be.

Q. She diagnosed the child with respiratory failure, leukopenia and hypotension, along with the tachycardia. Those things are all consistent with sepsis Is that correct?

A. They can be, yes.

Q. And are you aware before you testified here today from the District Attorney's Office -- you spoke with them before you came on the stand here; correct?

A. Yes.

Q. In fact, how many times did you meet with them before testifying here today?

A. I met with them yesterday at six o'clock.

Q. And you spoke with them over the phone prior to your arrival here, too, as well?

A. Yes.

Q. So, prior to your arrival here, you were aware that the Defendant was claiming, in the course of this trial, that this child was suffering from sepsis, septic shock; correct?

A. Yes

Q. And the District Attorney's Office told you everything that the defense was claiming about this child's condition that related to septic shock; correct?

A. I don't know if they told me everything. They told me that that was an issue in this trial.

Q. Doctor, you are aware from your review of the records

that both Samaritan Hospital and Albany Medical Center were treating this child for sepsis, septic shock; correct?

A. That's right. He was receiving antibiotics.

Q. And that's because they were giving him Ceftriaxone

A. And Vancomycin.

Q. And those are used to treat bacterial infections; correct?

A. Yes.

Q. And they can be used to treat things like bacterial meningitis, too; correct?

A. Well, Vancomycin is not particularly good for meningitis, but Ceftriaxone is.

Q. And both hospitals did -- you are aware that both hospitals did a physical examination of this child; correct?

A. Yes.

Q. And both physical examinations by Samaritan Hospital and Albany Medical Center revealed this child had no external bruises or contusions; correct?

A. Yes.

Q. And both examinations by both hospitals revealed thi child had no external bleeding. Isn't that correct?

A. Yes.

Q. And both Samaritan Hospital and Albany Medical Center, in their records, there's no notation that there's any concern about any cervical spine or neck injury; correct?

A. Yes

Q. And in fact, in the autopsy report that you reviewed, the autopsy report reflects that the cervical spine is intact; correct?

A. Yes

Q. And there's no inflammation of the neck tissue or muscles reported anywhere in any of the records in this case. Is that correct?

A. Correct.

Q. And Albany Medical Center, you are aware that a skeletal survey was done of the child's body, and there was no evidence of any recent or old fractures anywhere on this child's body. Are you aware of that, Doctor?

A. Yes.

Q. Would you agree that when this child went from Samaritan Hospital to Albany Medical Center, the child remained hypothermic; correct?

A. Yes.

Q. The child continued to have problems with his white blood cell count; correct?

A. Yes.

Q. In fact, his white blood cell count went down at Albany Medical Center; correct?

A. That's right, yes.

Q. As well as his platelet count. His platelet count

dropped quite a bit to a dangerously low level at Albany Medical Center; correct?

A. Yes.

Q. And obviously, a level of 29,000 would be of great concern to a doctor; correct?

A. Yes.

Q. Doctor, are you aware from your review of the record that at Albany Medical Center, the child was noted, as you testified earlier, to be suffering from coagulopathy problems?

A. That's correct.

Q. And that's problems with blood clotting; correct?

A. Yes.

Q. And you would agree, Doctor, that coagulopathy can be caused by sepsis or septic shock; correct?

A. That's one of the things that can cause it, yes.

Q. And when you have a coagulopathy problem, you can have bleeding anywhere in the body; correct?

A. Yes, but as far as I know, this child had no other bleeding other than his head injuries.

Q. Were you aware in the autopsy report, the pathologist noted the child had bleeding of the testes?

A. Well, he had some necrotic areas is what I understood him to have.

Q. Were you aware that Dr. Sikirica testified that the bleeding that he found in the testes is consistent with

coagulopathy? Are you aware of that, Doctor?

A. No.

Q. Are you aware that the autopsy report also revealed blood in the myocardium; correct?

A. I read it as areas of infarct, rather than frank bleeding

Q. Are you aware that Dr Sikirica testified that blood in the myocardium that he found was consistent with coagulopathy? Are you aware of that, Doctor?

A. No, I was not.

Q. In fact, with the coagulopathy problem, you can have bleeding in organs; right? That possible; correct, Doctor?

A. Yes.

Q. You can have bleeding in different parts of your body; correct?

A. That's right

Q. And that would include bleeding on the brain; correct?

A. Well, it depends on the nature and degree of the coagulopathy. You obviously have to have some type of either dead tissue or broken vessels to lead the bleeding. So, you have to have some kind of injury to tissues or vessels to actually initiate bleeding to a clinical degree.

Q. And, obviously, a person in septic shock is in a grave condition; correct?

A. Yes.

Q. Are you aware that both the records of Samaritan Hospital and Albany Medical Center reflect that this child wa suffering from signs of acute respiratory distress syndrome?

A. From being on the respirator, yes.

Q. Were you aware that that was diagnosed as a problem at Samaritan Hospital?

A. They suggested it was a possibility, yes.

Q. Are you aware that the doctor at Albany Medical Center indicated that this child was displaying symptoms consistent with acute respiratory distress syndrome?

A. Yes.

Q. And that syndrome can be caused by sepsis; correct?

A. I always thought it as something kind of secondary the resuscitation, actually, rather than a primary event. It a lung disease that's caused by, you know, the ventilators an the ventilation and the artificial expansion of the lungs.

Q. Fair to say, Doctor, you are not familiar with whether or not acute respiratory distress syndrome can be caused by sepsis?

A. ARDS, which is what you are talking about, I think, is a secondary phenomenon. Sepsis can cause you to stop breathing, and then you get resuscitated, and then you getlu changes because of the resuscitation. It's actually physiologic changes of the lungs based on being ventilated.

Q. Would you agree, Doctor, that ARDS can be connected to sepsis; correct?

A. Well, I mean, that can start the process, but I think you have to have some respiratory collapse which is then resuscitated, and then ARDS, or acute respiratory distress syndrome, is the result of the lung changes that occur with the resuscitation.

Q. Would you agree that sepsis can cause ARDS?

A. It can lead to that, yes.

Q. Taking you back to coagulopathy, Doctor, as you are aware, this child had a coagulopathy problem and was kept alive on a ventilator for a couple of days; correct?

A. Yes

Q. And during the period of time in which the child was kept alive on the ventilator, that coagulopathy problem would continue; correct?

A. He did have fresh frozen plasma, and that made it better, but he continued to have problems.

Q. In fact, being kept alive on the ventilator, there could be additional bleeding by the mere fact of being kept alive on the ventilator if he had coagulopathy problems; correct?

A. You mean in his lungs or --

Q. I'm talking about, Doctor, if the child is kept alive on a ventilator, and the child already has coagulopathy

problems, the time period, let's say a day or two in which th child is kept alive on the ventilator, the coagulopathy probl would still continue while the child was on the ventilator; correct?

A. Yes. The coagulopathy would continue.

Q. Are you aware that the records from Albany Medical Center indicated that this child suffered from pancytopenia?

A. From pancytopenia?

Q. Yes.

A. Yes.

Q. Can you tell the jury what that is?

A. Basically, it's bone marrow failure. The bone marr doesn't produce red cells, white cells or platelets.

Q. And that can be caused by sepsis; correct?

A. It can be.

Q. You would agree, Doctor, that this child considered -- exhibited a number of signs and symptoms consistent with sepsis; correct?

A. After he arrived at the hospital, yes.

Q. In fact, low white blood cell count, that's consistent with sepsis; correct?

A. Yes.

Q. Low body temperature, hypothermia, that's consisten with sepsis; correct?

A. Yes.

Q. Low blood pressure, hypotension, that's consistent with sepsis; correct?

A. Yes.

Q. Tachycardia is consistent with sepsis; correct?

A. Right.

Q. The child also had hypoglycemia Are you aware of that, Doctor?

A. Actually, he had hyperglycemia.

Q. Low blood sugar?

A. No. He had high blood sugar.

Q. Are you aware the records reflect that he had a blood sugar of 25 when they pricked his finger at Samaritan Hospital on the morning of the 21st?

A. I don't recall that I must not have read that particular notation.

Q. That would be low blood sugar; correct?

A. Yes.

Q. Would reviewing the records refresh your recollection, Doctor?

A. Yes.

Q. Defendant's C in evidence, under patient notes, please. First patient note of the day reflects, Doctor, fingerstick blood sugar 25?

A. I'm not finding it, but I'm still looking.

Q. Doctor, it's actually one of the first notes.

A. On this page?

Q. Yes, under patient notes, one of the first entries under patient notes?

A. No. It doesn't say anything about it.

Q. If I refer your attention, Doctor, entered by Suzan DeCelle, FSBS?

A. I'm sorry. I didn't know what that meant. I don't know what FSBS is.

Q. Is that a dictation term that you ever used for fingerstick blood sugar, Doctor?

A. No.

Q. What would be a normal level of blood sugar in a normal, healthy infant?

A. Seventy to a hundred.

Q. I draw your attention to the note for 9/21/08 for 9:15.

A. Okay.

Q. That notation reflects the child's blood sugar was a 50; correct?

A. Yes.

Q. And that's below what you would like to see in a normal, healthy infant; correct?

A. Yes.

Q. And, Doctor, is it true that low blood sugar can be sign of sepsis?

A It can.

Q. The mother reported to the hospital the baby had been unresponsive or lethargic. Are you aware of that?

A. Unresponsive at the time she found him?

Q. As well as lethargic?

A. At the same time or --

Q. Are you aware that was reported to Albany Medical Center about this child?

A. Well, when she found him, he was more than lethargic. He was down. He was not breathing.

Q If the mother reported the child -- to Albany Medical Center, the child was lethargic, being lethargic can be a sign of sepsis. Isn't that correct?

A. Yes

Q. Isn't it true, Doctor, this child just as likely died of septic shock as it was trauma?

A. In my opinion, it was trauma, and the septic shock was a secondary complication of the fact that he had ongoing head injury.

Q. Are you aware that Dr. Edge has testified that this baby had sepsis?

A. I don't know Dr. Regis.

Q. Or that Dr. Waldman testified that this baby had sepsis and, therefore, contributed to his death. Are you aware of that, Doctor?

A. I wasn't here for the testimony, and nobody told --

Q. Would you agree, Doctor, that sepsis contributed to this child's death?

A. Well, certainly, it was part of the picture, absolutely.

Q. That's because this child exhibited many signs and symptoms of septic shock; correct?

A. Yes.

Q. Now, there was a CT scan done on 9/21/08 at Albany Medical Center. Are you aware of that, Doctor?

A. Yes.

Q. You are aware that that CT scan made no mention of any finding of any blood on the brain?

A. I don't recall what the report said.

Q. Would reviewing the impressions and findings in the report refresh your recollection, Doctor?

A. Yes.

Q. Defendant's E in evidence.

A. Well, actually, it did say he had blood on his brai It said he had a large extraaxial fluid collection. That mea a fluid collection in his -- either in the subdural space or the subarachnoid space. So, there's abnormal fluid there, an probably is a large subdural collection.

Q. Well, Doctor, the impression that's written on the report reads, "Large bilateral extraaxial fluid collections,

probably subdural on the right". It does not mention the word blood, hemorrhage or hematoma. Isn't that correct?

A. Well, what this would imply is that he had subdural hemorrhage.

Q. I'm not asking what it implies I'm asking you what it says, Doctor

A. Well, it says --

Q. Doctor, let me finish my question The report does not state, under the impressions of the report which was read by Eric Hoover, M.D, a neuroradiologist, impression states, "Large bilateral extraaxial fluid collections." There's no mention of blood, hemorrhage or hematoma under his impressions Is that correct?

A. He did not specifically say the fluid was blood in his dictation.

Q. And that scan was read by an M.D., medical doctor; correct?

A. That's right.

Q. And, in fact, under the finding part of his MRI report, there was no mention of blood, hemorrhage or hematoma, either. Is that correct? Those words are not mentioned?

A. He said there's abnormal fluid there. He didn't describe what the fluid was, right.

Q. He makes no description of what that fluid is; correct?

A. He did not.

Q. And you'd agree, Doctor, there are many nontraumati causes for subdural hematoma; correct?

A. There are some.

Q. What are some of these nontraumatic causes?

A. Well, I wrote a paper once that had, I think, 210, including surgery, including vascular malformations, where th vessels break, including herpes infections, including -- oh, the differential diagnosis was very, very long; people put on heart lung machines. There's a long diagnosis; Moyamoya Syndrome, which is a rare tropical disease, Muenke Syndrome, which is a rare inherited disease. There's an extensive list

Q. And in fact, isn't it true that subdural hematomas can be caused by bacterial meningitis?

A. Blood -- what you get is pus, not blood in the subdural space. You can get collections of pus, but I have nc seen frank blood in bacterial meningitis.

Q. Isn't it true that you can get subdural hematoma -- you have researched subdural hematoma, whether they can be caused by streptococcus pneumoniae?

A. Again, you don't see frank blood. You get pus, or you get exudate, which is just clear fluid with white cells in it. It doesn't clot.

Q. And, in fact, these possible other causes also include prenatal, perinatal and pregnancy-related conditions;

correct?

A. Well, certainly, yes. Trauma can cause it.

Q. And would you agree that this mother had a number of pregnancy-related complications; correct?

A. Yes.

Q. And those include obesity, preeclampsia, high blood pressure, premature rupture of the membranes, pre-term labor; correct?

A. Yes

Q. Twin pregnancy?

A. Yes.

Q. And all these pregnancy complications can increase the risk of intracranial bleeding during childbirth, especially vaginal childbirth; correct?

A. Some of them can.

Q. And Doctor, would you agree that this breach delivery, forceps, meconium stained fluid, those would be birth related complications; correct?

A. My understanding is that this child was not breach, but was a normal delivery.

Q. Doctor, you are being asked to consider the records of both twins in this case. Isn't this true? Because this concerns both twins. Would you agree the records for Twin B reflect breach birth with forceps; correct?

A. Yes.

Q. In fact, there was meconium stained fluid, as well, discovered after the mother's membranes ruptured; correct?

A. Yes.

Q. And that would be a complication, as well; correct?

A. Yes. That means the fetuses were stressed, basically, and they pooped into the uterine cavity.

Q. And these birth related complications, they can increase the risk of intracranial bleeding during childbirth, as well; correct?

A. Yes.

Q. And intracranial bleeding can occur without trauma; correct, Doctor?

A. Well, like strokes. People have strokes. People have vascular malformations. You know, heads don't spontaneously explode. Something causes it.

Q. Well, you can have increased -- you can have intracranial bleeding if you have increased intracranial pressure; correct?

A. Actually, it's probably just the opposite, because that would take along vessels and -- keep vessels from bleeding, would push on vessels to keep blood flowing.

Q. Would you agree that meningitis causes increased intracranial pressure?

A. Yes.

Q. And that could cause bleeding on the brain; correct?

A. You mean subdural bleeding, or bleeding within the brain substance itself?

Q. Doctor, I would say any kind of bleeding. You have meningitis. You have increased intracranial pressure; correct?

A. Well, with meningitis, what happens is the tissue is eaten away, basically, and if you have an infection that leads into a blood vessel, yes, you can rupture a blood vessel. I have not seen acute subdural hemorrhage or actual clotted blood around the brain in babies who have meningitis. They get fluid and they get white cells and they get pus, but not blood.

Q. Would you agree that's possible, Doctor?

A. I have not seen it. I don't know.

Q. Now, Doctor, I believe that you testified earlier that during childbirth, there can be bleeding in the posterior fossa. Is that correct?

A. Yes.

Q. Are you aware that Dr. Sikirica found blood in the posterior fossa during his autopsy?

A. I don't know.

Q. Can you please step down from the stand, Doctor, and show us where the posterior fossa is on your drawing, if it's possible to do that?

A. It's not possible to do that on that drawing.

Q. Doctor, would reviewing the autopsy report refresh your recollection as to the finding of Dr. Sikirica with

respect to the posterior fossa?

A. Yes.

Q. I turn your attention to Page 8 of his report.

A. He says there's a small amount of adherent blood along the right aspect of the posterior fossa.

Q. You testified earlier that during childbirth, there can be bleeding in the posterior fossa; correct?

A. Yes.

Q. You also testified earlier that an ultrasound would not pick up bleeding in the posterior of the head. Is that correct?

A. Yes.

Q. That is because ultrasound does not cover the back c the head; correct?

A. Well, you are doing it through the open fontanelle c the infant, which the skull is not formed in the middle, the soft spot. And, so, when you take the transducer, you can see the front two-thirds of the head very well. You can't see what's back in the back, because that's as far as the transducer goes.

Q. So, if there was blood in the posterior fossa immediately after childbirth, that would not have been picked up on the May 14, 2008, ultrasound; correct?

A. That's right.

Q. Now, Doctor, for blood to get -- for blood from an

intracranial bleed to collect in the posterior fossa, the bleeding would have to occur at or shortly after the time of birth; correct?

A. I'm sorry. No You can get blood in posterior fossa from trauma, from any number of things. It doesn't only occur at birth.

Q. But you agree that it does happen during childbirth; correct?

A. It does

Q. And prior to your testimony here today, you have not reviewed any microscopic sections of tissues taken at the time of the autopsy; correct?

A. I looked at them, but I'm not capable of giving a scientific interpretation, because that's not my field.

Q. Doctor, you were asked questions about wheezing during your direct testimony, to bring you back to that. If the wheezing concerning this child didn't start until 8:30, nine o'clock in the morning when the mother woke up, wouldn't that seem to indicate there was not a severe head trauma, Doctor?

A. That's not the history that I was given. I mean, the history was that the baby got slammed down and started breathing funny, started wheezing.

Q. Well, if the history you were given showed there were no breathing problems Saturday night, no breathing problems

Sunday early morning, Sunday 4:00 in the morning, Sunday 6:0 in the morning, and the first breathing problem occurred at 8:30 to nine o'clock when the mother woke up and found the child having breathing difficulties, being the first time sh noticed wheezing, that would seem to indicate there was not severe head trauma; wouldn't it, Doctor?

A. My understanding was the kid wasn't breathing at a when she found him at eight o'clock. That's the way I read the -- that he was down and not responsive. I'm sorry. I don't recall reading about any wheezing at 9:00 in the mornir on Sunday.

Q. Well, Doctor, as you have testified, you are relyir upon statements purportedly made by Adrian [redacted] that talkec about wheezing. Now, if -- assume for a moment, Doctor, that if there was no wheezing Saturday night, no wheezing early Sunday morning, no wheezing 3:00 or 4:00 in the morning when the child had a bottle, no wheezing 6:00 a.m., and the first report of any wheezing or breathing difficulty was at 8:30 or 9:00 Sunday morning, wouldn't that seem to suggest there was severe head trauma, Doctor?

A. No. The child could have experienced head trauma a then had a gradual downhill course until his breathing was affected. So, that doesn't rule it out. If it was there, th would make me think that the child was in very bad trouble already on Saturday night.

Q. Well, if you thought -- if someone had inflicted severe head trauma, you would expect, shortly after that event, if they were seen in a hospital, you would expect them to have some kind of bump on their head. That's a likely sign; correct?

A. Well, oftentimes, kids, we find when we pull the scalp back at autopsy, we will find all kinds of bruising and lesions with no external sign of trauma. So, that doesn't rule it out.

Q. And in this case, obviously, there was no sign of any bumps on this child, externally on this child, back of his head; correct?

A. Yes

Q. And there were no signs of any bumps or swelling on the side, externally, of his head; correct?

A. Right.

Q. Doctor, you can have brain swelling without trauma; correct?

A. It's an end stage that comes from many different conditions.

Q. Well, you can have brain swelling due to coagulopathy; right?

A. Not coagulopathy in and of itself, but things that can cause coagulopathy can cause brain swelling. If you had coagulopathy and you had a large hemorrhage into the middle of

your brain, it wouldn't be surprising that swelling would result.

Q. You can have brain swelling due to increased intracranial pressure; correct?

A. No. Brain swelling causes increased intracranial pressure.

Q. But there are a number of things that can cause bra swelling that have nothing to do with trauma. Isn't that correct?

A. Yes.

Q. Doctor, isn't it true that retinal hemorrhages are caused by increased intracranial pressure?

A. The only hemorrhages that we see in infants and children that have increased pressure are tiny little splinte right around the optic nerve that leads back to the eye. It doesn't cause extensive hemorrhaging throughout the eyeball.

Q. Isn't it true that retinal hemorrhages can be cause by things that have nothing to do with trauma?

A. Yes.

Q. In fact, they can be caused and have shown to be caused by meningitis; correct?

A. A few tiny little spots on the posterior pole, not massive -- not large, extensive hemorrhages. Most of the things in children that cause retinal hemorrhages cause a few spots on the very back of the eye. They don't cause extensive

multi-layer hemorrhages.

Q. You testified earlier there are hundreds of things that can cause retinal hemorrhages; correct?

A. That's right.

Q. And a number of those things have nothing to do with trauma. Is that correct?

A. That's right.

Q. And in fact, are you aware from the autopsy report that Dr. Sikirica found pus around the area of the right eye. Are you aware of that, Doctor?

A. I was.

Q. And Doctor, what's a G-force, if you know?

A. It's the force of gravity. It's a measure of linear acceleration.

Q. Doctor, are you aware that throwing a baby upon a mattress at a height of four feet generates G-forces in the amount of 30 to 40 G's? Are you aware of that, Doctor?

A. Yes.

Q. And isn't it true it's generally accepted that a G-force of at least a hundred G's is required to produce subdural --

MS. BOOK: Objection, Your Honor.

Q. A subdural hematoma in an infant?

THE COURT: On what basis?

MS. BOOK: On the basis Dr. Jenny is not a

biomechanical engineer, as was so pointed out earlier.

MS. EFFMAN: She's was questioned about the acceleration-deceleration from the District Attorney. I think it's a proper question for cross-examination.

THE COURT: I will allow it.

A. I'm sorry?

Q. Do you want me to repeat the question?

A. Yes.

Q. Are you aware that it's generally accepted forces of -- a G-force of at least a hundred G's is required to caus a subdural hematoma in an infant?

A. There actually is no data for determining an injury threshold in infants. Any injury thresholds data that has be derived comes from adult animals, baboons and chimpanzees and whatever, but there is no injury threshold for head injury tha has been determined for infants.

Q. Is it fair to say you are not familiar with any biomechanical studies or studies done by a neuropathologist which would discuss the number of G-forces that people in thos fields of biomechanics and neuropathology feel are necessary, minimum thresholds to cause subdural hematoma? You are not familiar with that?

A. We don't know. Nobody knows. Nobody has ever done experiments on human infants, or even on infant chimpanzees, baboons, primates that would lead to a threshold for head

injury. So, people have taken adult data from adult brains, which are very different than infant brains in their biochemistry, in their composition, in their vulnerability to injury, and they apply those thresholds. They say -- the only difference between an adult and a baby is the brain is littler in a baby, but that's very invalid, because that's not true. The brain tissue itself is extremely different in its makeup, in the amount of white matter, in the amount in its vulnerability to injury. So, it is generally accepted in biomechanics that there is no known infant injury threshold. Such a thing probably exists, but it's very difficult to research for two reasons. One is you can't pick up babies and hit them in the head until they pass out to find out what the injury threshold is. You can't do that. The other thing is that the current climate of opinion is such you can't even do biomechanical experiments on primates. They are too much like us, basically, and it's generally not considered, you know, a reasonable, ethical thing to do. The current experiments that are being done are being done in animals like rats and piglets; and certainly, we are finding that in piglets, the injury threshold is much lower than it is in adult pigs, and they are much more vulnerable to injury than adult pigs are. So, what I'm telling you is we don't know at this point, and those experiments have never been done, and given the current climate of opinion, probably won't be done.

Q. Fair to say, Doctor, that you are not familiar with studies done by neuropathologists as to how many G-forces are needed to cause a subdural hematoma?

A. I think people would speculate. There's no empiric data. There's no empirical data that has been derived from experiments to support that speculation.

Q. That's your opinion; correct?

A. That's the general opinion of the people in the field.

MS. EFFMAN: One moment, Judge.

THE COURT: Take your time.

Q. Doctor, isn't it true that there are multiple occasions in the birth records for both Twin A and Twin B where there's references to both [redacted] and [redacted] under the records of Twin A, and references to [redacted] and [redacted] under the records for Twin B?

A. I wouldn't be able to say right offhand. It's been month or two since I have read them.

Q. If the records, People's Exhibit 13, reflect the name [redacted] under Albany Medical Center Neonatal Intensive Care Unit for Twin A, but also had, on the same medical record, a neonatal test and workup for blood work for [redacted] Thomas under the same medical record number, Doctor, you would agree there is some confusion as to -- with respect to Albany Medical Center as to if Twin A or Twin B is [redacted] or [redacted];

correct?

A. I think they didn't keep good track of things, no. I would agree that that probably is not acceptable.

Q. And you agree, probably, it is important if you have twins for the hospital to take proper care in making sure that you are identifying the twin by their proper name; correct?

A. People are usually very careful about that, yes

Q. Obviously, if the records for Twin A reflect references to Matthew on one sheet under medical record number 2257910, and also there's a notation of the name Malakai Thomas under 2257910, that would be improper -- or not good keeping of records by Albany Medical Center; correct?

A. That would be sloppy.

Q. And you'd agree, Doctor, under the records of Twin B that you previously looked at, record number 2257912, there's references several times in these records to both Matthew, Twin A, and baby boy Malakai in this record. Isn't that correct?

A. I don't recall several times, but I will take your word for it.

Q. And if the record reflects several different references to both Matthew and Malakai under Twin B under the same medical record number, that would affect the -- that would not be very good record keeping on the part of Albany Medical Center. Isn't that correct?

A. I would assume so.

MS. EFFMAN: No further questions.

THE COURT: Ms. Book, any redirect?

MS. BOOK: Yes, Your Honor. Thank you.

REDIRECT EXAMINATION

BY MS. BOOK:

Q. Dr. Jenny, going back to times you may or may not have reported parents back at your hospital at home, are you a mandated reporter as a doctor?

A. Yes, I am.

Q. What does that mean?

A. In our state, the law is written that if you suspect child abuse or neglect, you are required to report it to the authorities.

Q. Do you have to be right about it?

A. You have to suspect it, yes.

Q. And if you suspect it and you don't report it, what would happen?

A. You could be liable for civil penalties or you could have your license -- get a black mark on your medical license and be required to take extra education.

Q. If you are a mandated reporter, is that something you take seriously?

A. Oh, yes. It's a requirement of the state to practice medicine and maintain my license.

Q. Have you reviewed many defense cases?

A. Yes

Q. Throughout your career What normally happens with defense cases?

A. Well, several different things Some I have testified in. Some I write back and say this is, you know, I think this is abuse, and they say fine, thanks; and some I have actually served as a consultant, actually attended the trial and advised the defense attorneys, listened to the testimony of the prosecution witness to make sure it was accurate and that they were not, you know, inflating the claims or whatever. So, there's those options.

Q. If you write back and say, "I suspect this is not abuse," do they often call you to testify?

A. No. Wait. If I write back and say it's not abuse?

Q. That it is abuse. I'm sorry

A. It is abuse, yes.

Q. Do they often then call you to testify?

A. No.

Q. Okay Going back to the ultrasound versus CAT scan when an infant is born, is an ultrasound sufficient to look at subdural hematomas that would be located at the top of your head?

A. Yes. In fact, the CAT scan has 2,000 times the radiation of a chest x-ray. So, we always think twice before ordering a CAT scan for anything, but ultrasound does a very

good job at looking at subdurals and extraaxial fluid collections in that part of the brain, because it's right unc the hole that you can look through.

Q. Okay. You mentioned on cross-examination that one the twins was bigger and healthier when born. Which twin was that?

A. It was Twin A.

Q. Is that [redacted] [redacted]?

A. As far as I know.

MS. EFFMAN: Objection, speculative.

THE COURT: Sustained.

MS. EFFMAN: Move to strike.

MS. BOOK: Your Honor, she should be allowed t testify. She's reviewed all the records. She said as fa as she knows, that was the name of -- [redacted] was the firstborn child.

MS. EFFMAN: Your Honor, I think the records -- anyone who looks at the records knows there's numerous references to both [redacted] and [redacted] as Twin A and Twir B. So, when we are talking about Twin A and Twin B, there's confusion in the records. There's been no proceeding brought by anyone to clarify whether it's Twir A or Twin B that passed away or survived.

THE COURT: The Doctor can testify to her understanding of the records.

Q. It was your understanding that that's [redacted] [redacted]?

A. The child that mother identified as the first baby born was [redacted].

Q. Now, on cross, there was a list of symptoms noted first at Samaritan Hospital and -- such as leukopenia and tachycardia, and all the other things that the child presented with at Samaritan Hospital, and you have testified that all of these things could be consistent with sepsis. With the exception of the low white blood cells, what else could these symptoms be consistent with?

A. They are all symptoms and signs of a child who sustained head trauma. In fact, it's very common that you would have low body temperature, low blood pressure, cardiac instability, difficulty breathing. You know, they are all things we see, low platelet count, coagulopathy, coagulation problems. That's standard in our kids with head trauma.

Q. So, the only symptom listed that's not consistent with head trauma, would that be the leukopenia?

A. The low white count, yes.

Q. Dr. Jenny, if [redacted] [redacted] was thrown onto a soft mattress in this case, would you expect to see external bruising and contusions?

A. Not necessarily.

Q. Doctor, let's talk about the bleeding in the testes and the heart. You said that was a necrotic area?

A. That's what I remember reading; that there was an area where the tissue had died, essentially, in areas in the heart and the testes.

Q. So, did it surprise you to find bleeding in those areas?

A. Well, any time you have tissue that's falling apart, the capillaries that support it are going to be leaking.

Q. And what is an infarction?

A. An infarction is dead tissue because of lack of circulation to the tissue.

Q. Where was that found in this case?

A. Again, in the heart muscles.

Q. And you also testified that ARDS could be from being on a ventilator?

A. Yes.

Q. What else could a ventilator do to you after being on it for a couple-day period of time?

A. Most kids get pneumonia, because you can't cough. You don't clean out your lungs. It's a very artificial environment, and the lungs get dried out. You get lots of lung changes secondary to being on a ventilator.

Q. And you were asked about the CAT scan performed on 9/21/08 that made no mention of the word blood; it only made mention of the word fluid?

A. Yes.

Q. Do you know: Was blood found inside of [redacted]'s head at the autopsy?

A. Yes

Q. And you wrote a paper, you said, that there were 210 if I wrote it correctly, other causes of subdural hematomas?

A. I don't remember the number. I wrote -- in one of my papers, we researched the literature and found everything we could find, most of which, by the way, were in adults, but we put them on the list, anyway, and then talked about how you would rule that out and what kind of testing would be done and what the associated signs and symptoms would be. So, we just kind of made a laundry list of everything that's known about subdurals and then published it in a journal.

Q. So, on this laundry list of all the things that could potentially cause a subdural hematoma, do you have an opinion in this case as to what caused [redacted] [redacted]' subdural hematomas?

A. Head trauma.

Q. Doctor, I want to go back to the bleed in the posterior fossa that was found at the autopsy. Can you tell us what that means?

A. Posterior fossa or bleed?

Q. Both.

A. Well, basically, the head is divided into three compartments. You have a right side that has a membrane,

actually a pretty thick structure that separates the right fr
the left, and then you got -- yes, right side. And then a le
side, and then you got a third compartment that's below, kind
of a thick membrane where your cerebellum sits. That's this
little round thing that controls balance, among other things,
but that's the posterior fossa, and it doesn't communicate wit
the right and the left parts of the head. It's kind of an
isolated part of the head.

Q. Is that the part of the head that you would not see in an ultrasound?

A. Yes.

Q. And do you have an opinion as to whether the blood that may have been located in [redacted] [redacted]' posterior fossa, whether that was at all related to the subdural hematomas that were found on the top of his head?

A. That's in a completely different compartment, and th compartments don't communicate unless there's some kind of major tear to the membrane from trauma, like an auto accident.

Q. Assuming he did have blood in his posterior fossa that would have been there, would that cause any sort of rebleed or subdural hematoma on the top of his head?

A. No.

Q. And you testified that there's many different causes of retinal hemorrhages. The retinal hemorrhages found here, are they consistent with head trauma?

A. Yes

Q. And do you have an opinion as to whether or not the retinal hemorrhages in Matthew Thomas' eyes were a result of head trauma?

A. They are certainly consistent with it

Q. And is a cerebral edema consistent with head trauma?

A. Yes

Q. And there was a lot of talk about how many G's would be needed to cause injury. What do you mean when you say there's no empirical data about the force of head trauma?

A. Well, in biomechanics, people attempt to set injury thresholds, like the National Highway Transportation Safety Administration. They have an injury threshold measure that they say if your car exceeds that in a crash test, then your car gets a bad mark, and that data is based on adult primate experience, like chimpanzees and whatever, and it's also based on some human experiments. In the 1950's in the U.S. Air Force, there were actually people who volunteered to be put in sleds and then accelerated and decelerated very rapidly. Some of them lost consciousness and ended up in the hospital, but basically, they could actually measure G-forces. And with that data and with data from primates and with accident reconstruction data, they came up with their best guess for what the injury threshold is for adults, but the data on injury thresholds that they use for, like, infant car seat testing is

just derived from the adult data. So, they are assuming that, otherwise, babies are just little adults, but we know that the infant brain is much softer. It has a lot more water. It has a lot less protein. It's much more vulnerable to injury. The biochemical response to injury is very marked in terms of bad chemicals being released in the brain compared to adults. And so, you know we are looking at apples and oranges here. So, although NHTSA, the highway transportation people, do define a criteria they use to test car seats, it's not based on data that came from any kind of experiments on infants or even infant primates.

Q. As far as you know, are there any reliable studies o the force it would take to damage an infant's brain?

A. You know, I just don't think we know that. There ha not been a limit that has been generally accepted in the community as, you know, the standard, and so, that has not yet been done, and that's stated frequently in the literature. As of two months ago, the number one person in the field put that particular statement in one of her papers.

MS. EFFMAN: Objection, hearsay. Move to strik that portion of what another person says.

THE COURT: Sustained.

Q. Doctor, you were asked if sepsis contributed to the death of [redacted]. Do you have an opinion, to a reasonable degree of medical certainty, what caused the death

of [redacted]?

A. I think he died of a head injury and that he got sicker because he was septic.

MS. BOOK: Nothing further.

RECROSS EXAMINATION

BY MS. EFFMAN:

Q. Just a few questions, Doctor. Hypoglycemia, that has nothing to do with head trauma; correct?

A. We see that in kids with head trauma, particularly if they have been in shock for a while and been down for awhile.

Q. And in terms of pancytopenia, if I'm pronouncing it correctly - I'm probably not - but pancytopenia or pancytopenic, that has nothing to do with head trauma; correct?

A. We see low red blood counts, anemia, and we see low platelet counts. Low white cell counts is not generally something we see in infants who have had head trauma.

Q. Fair to say, Doctor, that hypoglycemia or low blood sugar can be caused by a number of things that have nothing to do with trauma; correct?

A. Yes.

Q. You mentioned during your testimony that National Transportation Safety Administration has done studies with car seats; correct?

A. Right.

Q. And studying infant car seat standards, it has a head

injury threshold. What is that threshold?

A. Well, it's called the head injury criteria, and it a number. It's kind of an artificial number that's based on taking a wave form from an impact event and then taking the maximum point of the wave form and then taking two points at certain period of time on either point of the maximum, and th integrating that curve to come up with a number that they set as a standard. So, if you put your crash test dummy in a car seat and you crash it, they then calculate that number and sa your car seat passes or it doesn't pass. That's called a hea injury criteria.

Q. They have a set minimum and maximum number, a minim number for forces for head injury threshold?

A. Well, this number, which it doesn't have a -- it's not a number that has, like, something behind it that says wh it is. It's a pure number. It doesn't have centimeters or inches or G's or whatever, but for adults, the head injury criteria threshold is 1,000; for infants, it's 560.

Q. And what is the tentorium, Doctor?

A. The tentorium is the membrane that separates the posterior fossa of the head from the upper contents of the head.

Q. Isn't -- in a newborn infant, the tentorium is not fully developed; correct?

A. Well, I mean, it's certainly functional. As time

goes on, it thickens, but it's there and it's perfectly functional, and it is a complete separation between the lower head and the upper head.

Q. And at that time, the membrane is very thin, correct, when the child is first born?

A. Well, thinner than it is when they are an adult, but it's still a substantial anatomic structure.

Q. Isn't it true that in a newborn infant, blood can flow from a frontal subdural to the posterior fossa, because the tentorium is not fully intact?

A. No. That is not true. That has been stated many times, but the neuroanatomists have completely refuted that.

Q. So, if there are neurological studies that indicate that, you would disagree with that?

A. I would disagree with that. They are separate compartments.

MS. EFFMAN: No further questions.

THE COURT: Ms. Book?

MS. BOOK: Nothing further Your Honor. Thank you.

THE COURT: Doctor, you may step down. Thank you. Do the People have any further witnesses?

MS. BOOK: People rest, Your Honor.

THE COURT: Can I see both of the attorneys?

(Discussion off the record at the bench.)